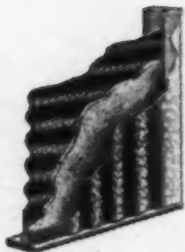


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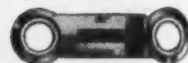
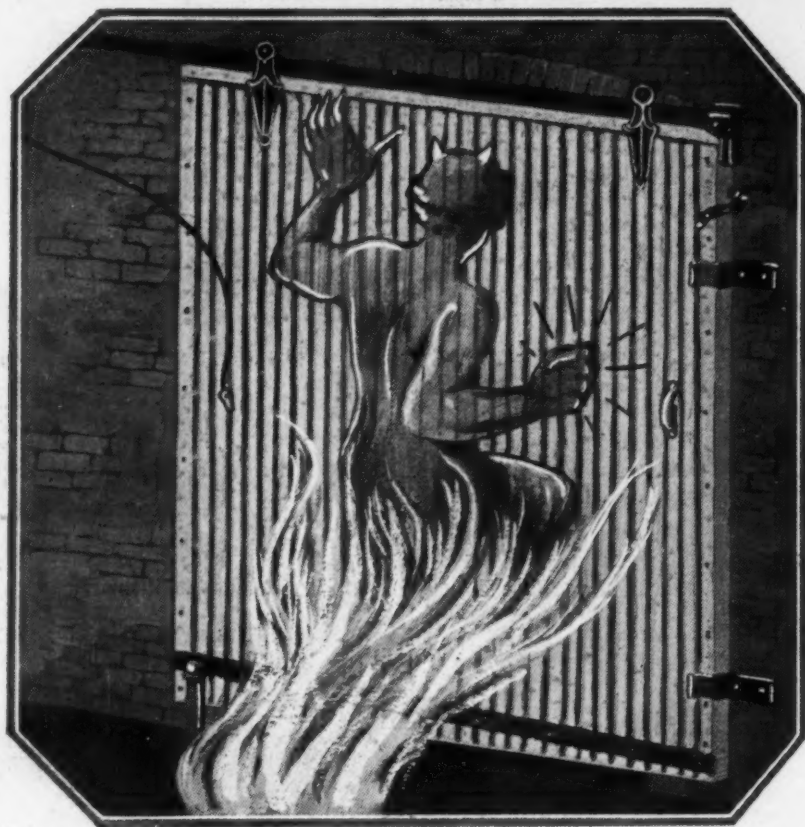
THE ARCHITECTURAL FORUM



OCTOBER
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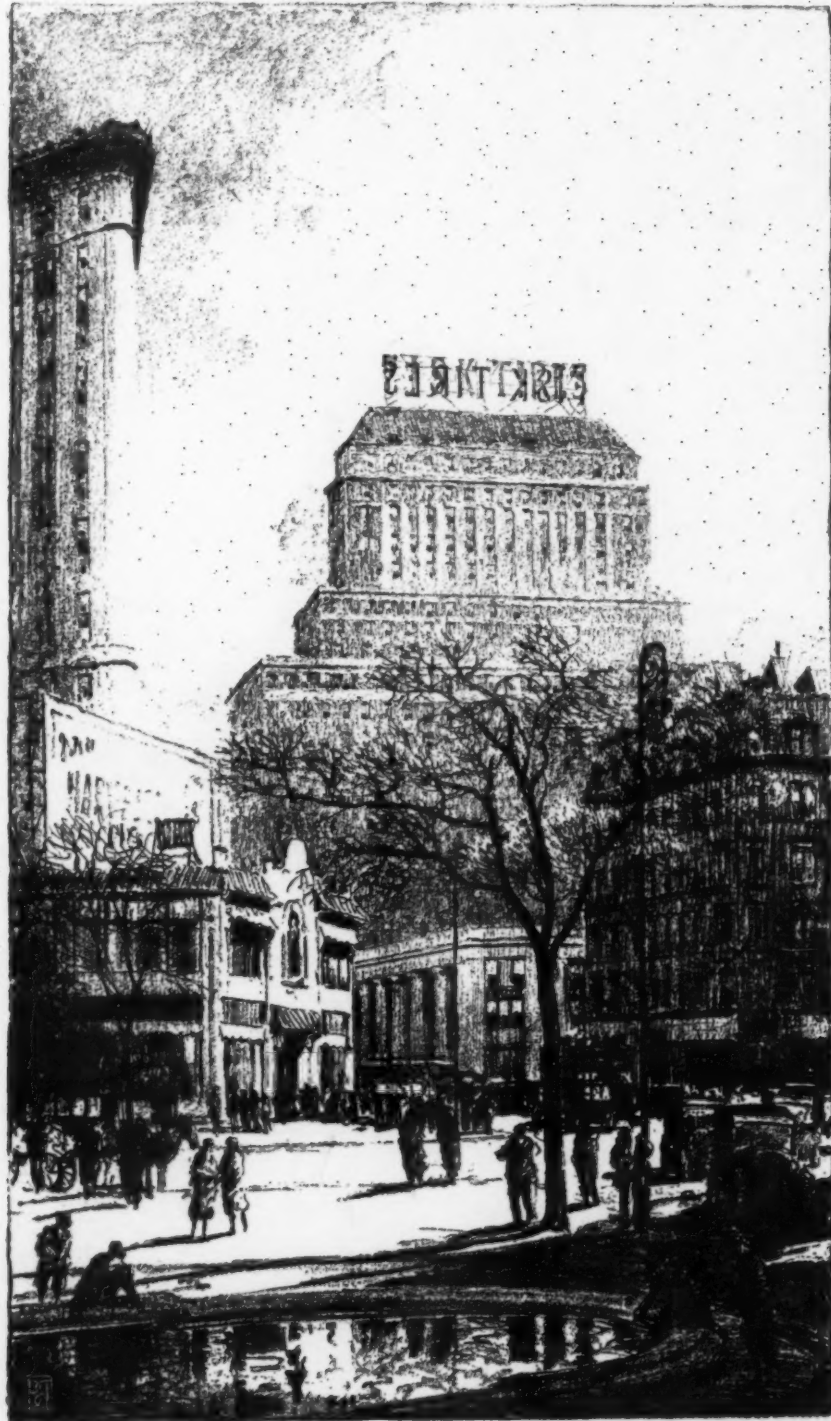
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AT COLUMBUS CIRCLE, NEW YORK

From a Sketch by Birch Burdette Long

The ARCHITECTURAL FORUM

Volume XLV

OCTOBER 1926

Number 4

The New Fine Arts Building in San Diego

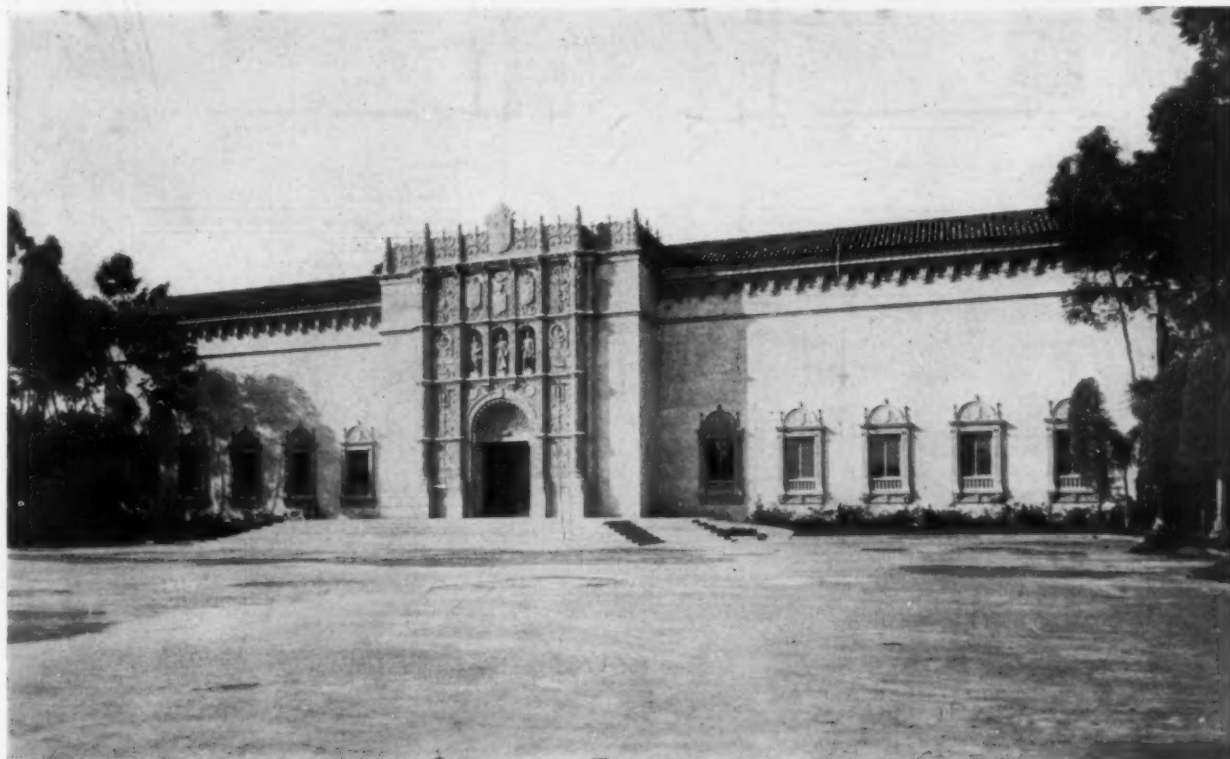
WILLIAM TEMPLETON JOHNSON and ROBERT W. SNYDER, Architects

By ROSE HENDERSON

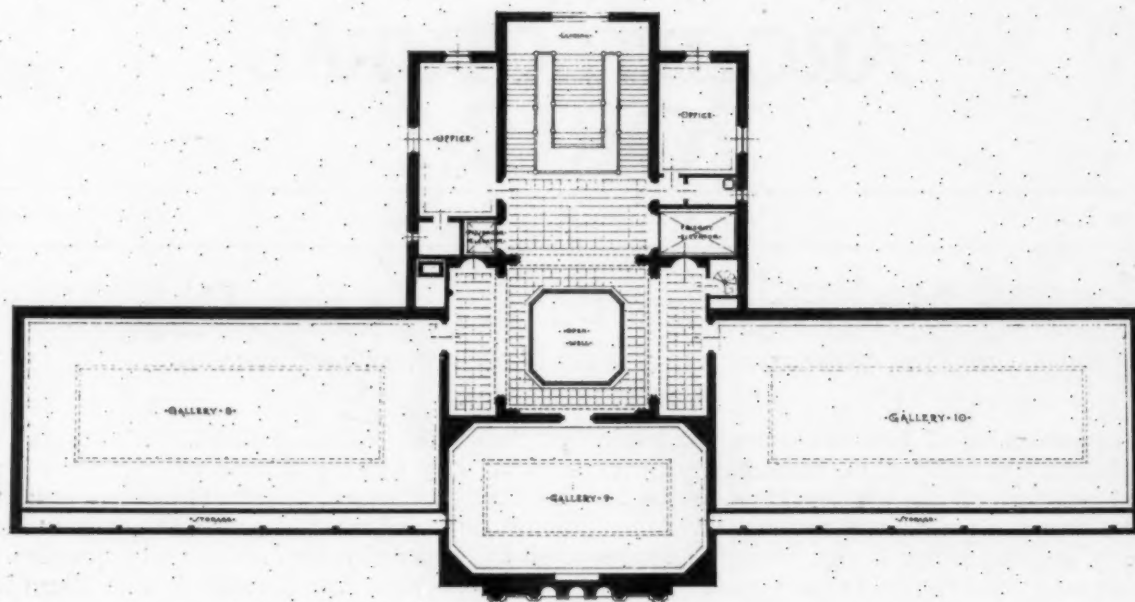
IN the awakening of general concern for better architecture in America, the various art galleries and museums of the country have exerted an influence that is often directly apparent and is undoubtedly responsible for larger, intangible results which cannot always be traced to any specific source. By an adaptation of traditional modes to the requirements of modern buildings dedicated to art, architects have been able to present interesting and vital examples of construction that command public attention. The function of the art museum has been extended very generally. In many instances such a building has become more or less of a civic and social center, and the old atmosphere of aloofness has largely disappeared. This new significance of art as a community affair has in itself led to greater respect for architectural dignity and grace, and it has, in turn, provided a warmth of social background

for the creative builder. An intelligently designed art building may logically become an inspiration for a coherent civic center. It should serve to unite the best thought and talent of a town or city and to furnish an opportunity for architectural expression.

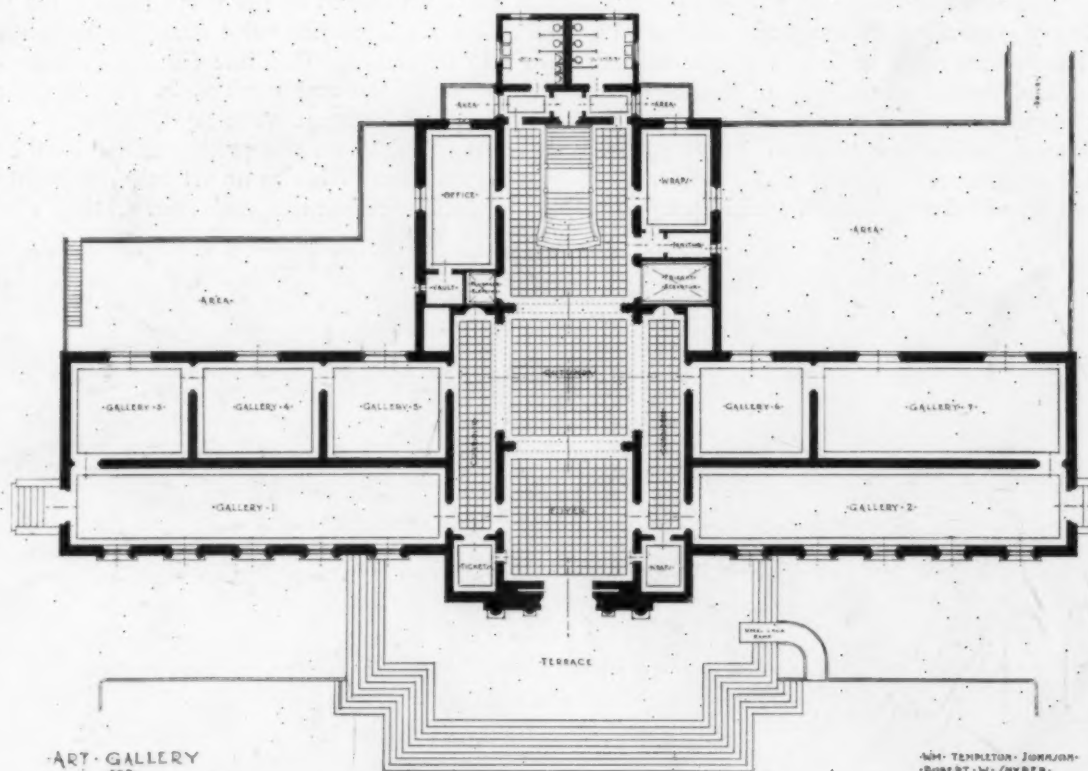
The new Fine Arts Building in San Diego is a structure in harmony with its surroundings and possessing at the same time individual character and interest. Situated in Balboa Park, one of the most beautiful "made" parks in existence, this building was erected to fit in at the north side of the plaza in that unusual architectural ensemble designed by the late Bertram G. Goodhue for the Panama-California Exposition and retained by San Diego as a permanent civic group. The style, that of the early Spanish Renaissance, was predetermined by the site, but the architects felt that an art building might well possess more refinement and reserve than are ex-



Fine Arts Building, Balboa Park, San Diego



SECOND FLOOR



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BALBOA PARK, SAN DIEGO, CALIF.

WM. TEMPLETON JOHNSON
ROBERT W. SNYDER
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FIRST FLOOR

PLANS, FINE ARTS BUILDING, BALBOA PARK, SAN DIEGO
WILLIAM TEMPLETON JOHNSON AND ROBERT W. SNYDER, ARCHITECTS



MAIN ENTRANCE, FINE ARTS BUILDING, BALBOA PARK, SAN DIEGO
WILLIAM TEMPLETON JOHNSON AND ROBERT W. SNYDER, ARCHITECTS



The Main Staircase



The Sculpture Gallery



Natural History Museum, Balboa Park, San Diego



Small Picture Gallery, Fine Arts Building



Decorative Art Room, Fine Arts Building



Botanical Building, Balboa Park, San Diego

pressed in the other park structures, which reflect considerable Mexican as well as Spanish influence. The art gallery is therefore differentiated from its neighbors by a certain classic reticence, and yet it keeps enough of their spirit to maintain a consistent congruity. Ample wall spaces and the freedom and warmth of decorative mouldings and facade are at home in the tropical luxuriance of the park setting, with its slender columns of eucalyptus, its gorgeous masses of flowers, and the stretch of blue bay not a great distance off, to the south of the gallery front.

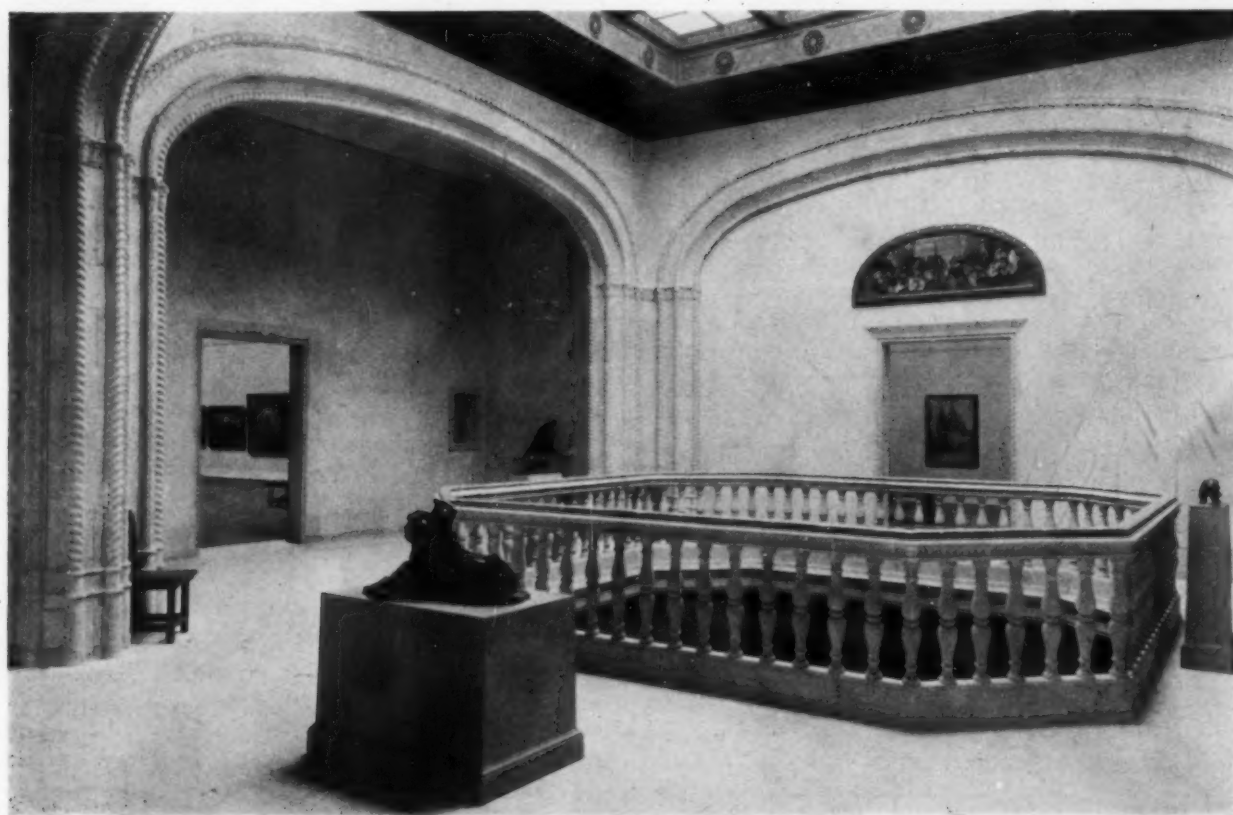
The Spanish painters, Velasquez, Murillo and Zuraran, are represented in full-figure sculptures of the facade, and busts of two others, De Ribera and El Greco, are introduced in the ornamental panels at either side of the imposing center group. In the upper part of the facade the coats of arms of Spain, the United States, California and San Diego are introduced in the decorative detail. Architecture, sculpture, metal working and the various allied arts are represented on small shields in the lunettes above windows.

Architectural interest of the interior appropriately centers in the main entrance hall and stairway, and the galleries have been kept severely simple as an unobtrusive background for the various exhibits. Decorative mouldings and balusters carry the eye up to the polychrome ceiling beams and panels done in interesting patterns in old blues, reds, yellows and greens. On the lower story ceiling are square panels of dull blue or red, having designs in brown and tan. A row of bright blue enameled tile tops the stone balustrades. The rich mosaic of the ceilings pro-

vides a satisfying accent, balancing the austere simplicity of the plaster walls and harmonizing with the Spanish character of the structural detail. The fenestration is pleasing, especially in the arrangement of the large window above the main stairway.

On the first floor are two large galleries intended for statuary. Back of these are smaller rooms to be used for tapestry, ceramics, prints and various other collections. On the second floor the main galleries will contain paintings, and they are appropriately lighted for this purpose. The prismatic ceiling glass with cloth louvers above the suspended skylights directs the major part of the light toward the walls and keeps practically the same illumination throughout the day. Back of these large picture galleries are smaller rooms for prints, and for library and office spaces. Particular care has been taken to provide comfort for visitors. Many invalids live in San Diego because of the delightful climate, and so a special incline for wheel chairs is provided at the main entrance, and the passenger elevator will accommodate wheel chairs. The ventilating plant provides for a complete change of air every five minutes, and the incoming air is thoroughly cleansed by a system of fans which is installed in the basement.

The Fine Arts Building is a gift to the city by Mr. and Mrs. A. S. Bridges of San Diego. At first the building will be used largely for visiting exhibits, and permanent collections will be acquired gradually. The architects have succeeded notably in their efforts to make the structure a pleasing and homogeneous unit in a singularly imposing park group.



Detail, Second Floor, Fine Arts Building

Reims Reborn

By J. DONNELL TILGHMAN

FRANCE, in her reconstruction of the regions left devastated by the war, has often been likened to a phoenix, and the worn out simile persists in the mind of the traveler who pauses to watch the stone cutters and masons rivaling the craftsmen of the middle ages in the work they are accomplishing on ruined cathedrals and churches. In every little mutilated village chapel there are workmen, sometimes but a few, reverently restoring to their former condition these marvelous architectural expressions of the religious fervor of a past age. In the cathedral at Soissons, literally blown in two by shell fire, indomitable France is attacking a task that at first glance seemed to be entirely hopeless.

But the interest of the world is chiefly centered, now as during the war, upon the Cathedral of Reims, one of France's most highly prized Gothic treasures, the scene of the crowning of her kings, a church as inseparably associated with her history and national life as is Notre Dame itself. Before the first German shells fell upon Reims it proudly dominated the city and surrounding country, an unrivaled example of the Gothic architecture of the thirteenth century, glorying in beauty of proportions and execution, its windows filled with glass equaled only by that of Chartres, its portals decorated with splendid sculpture, the interior enriched by tapestries, paintings, and ancient choir stalls. Above all others, this was a complete expression of the ecclesiastical art of the middle ages. But a different picture presented itself after the Armistice. Over a wrecked city a mere skeleton of the former Notre Dame de Reims reared itself. Great holes opened to the sky in vaulting unprotected by any roof; windows were mere blank openings; mutilated statues tottered in shattered niches; and even the pigeons that once fluttered about the intricate carvings and cornices were gone, their places taken by crows, adding to the desolation and bleakness with their black silhouettes and hoarse cries. Now, after several years of painstaking labor, the scars of bombardment and fire are beginning to disappear. The casual observer, as he glances at the restored nave, is far too likely to belittle the damage that was done. He fails to realize what effort and skill have gone into the work of rehabilitation; nor does he stop to remember that behind the stone wall that now separates nave from transepts there is a veritable ruin, a roofless choir, gaping holes, weakened supports, the repair of which may take generations to accomplish. The time will come, however, when Reims Cathedral will stand, as formerly, the perfection of Gothic architecture, minus, unfortunately, that which our generation can neither create nor restore,—the color of ancient glass, the charm of mediæval sculpture, the richness of carved wood. Thanks to the genius and energy

of France, our children's children may admire the architecture of Reims, though they will know its decoration only in part, since much must be lacking.

From September 4, 1914, when the first shell burst in the Cathedral, until October, 1918, the edifice was subject to an almost ceaseless bombardment. By actual count considerably more than 280 powerful shells struck the building during that period, to say nothing of innumerable projectiles during bombardments so severe that it was impossible to record their number. The windows were shattered, sculptures were chipped and broken, great holes were torn in walls and vaulting, and the stability, even, of the entire structure was threatened. Due only to what was, perhaps, a premonition of disaster on the part of the builders in constructing vaults of unusual strength and thickness, the building did not collapse. Some of the most irreparable damage was occasioned by fire. On September 19, 1914, three incendiary bombs fell on the church. These set fire to scaffolding that had been erected about the north tower for purposes of reconstruction. The conflagration spread to the timbers of the roof, and finally to the furniture within the choir, and to the straw which had been piled in the nave to act as bedding for some hundred wounded, left there by the Germans in their hasty evacuation of the city a few days before. For hours the building was given over to the flames. The following day found it roofless, with the most priceless of the sculptures of the north portal and inner western wall fatally damaged by the calcination which wrought such injury.

At the end of the war a serious problem presented itself. Was the Cathedral of Reims to be restored, or should it be left as a memorial and reminder to future generations of all France had suffered and lost during more than four years of invasion? Famous men ranged themselves on both sides. Matters were not brought to a climax until the Archbishop of Reims requested that his cathedral be turned again into a place of worship, reminding those who were in favor of making the ruined sanctuary a bleak and terrible monument, "*une honte pour eux, pour nous un Parthenon*,"—that the Church had need of its house. And so the work of restoration was undertaken, and considerable progress has been made.

During the war, M. Sainsaulieu, the architect in charge of the Cathedral, took some steps toward the protection of the building. Unfortunately, but unavoidably, this was done at a late date. France, as well as the entire world, was aghast at the destruction of so great a work of art. It was universally expected that the sanctity of Reims would be respected, that the protests of all nations and the appeals of the pope himself would be heard, and that the bombardment of the church would cease. So in spite of M.

Sainsaulieu's efforts, it was some time before the doors were locked against anyone who wished to enter and, in a misguided desire for souvenirs, pick up valuable bits of sculpture or fragments of glass, or in any thoughtless manner add to the damage already done. Against further bombardments, the portals of the west front were protected by sand bags; a wall sheltered the sculpture of the end of the nave, and a weakened pier at the crossing, the collapse of which threatened the whole building, was supported and strengthened against further injury.

The first work attempted after the Armistice was that of protection rather than of restoration. For several years the roofless building had been exposed to the elements, so that dampness and frost were rapidly increasing the damage already done by explosion and fire. In March, 1919, a protective covering of corrugated iron was erected over the building. During this time German prisoners were employed in clearing out the debris in both nave and choir. Some conception of the amount of broken stone piled between the walls by the collapse of vaults can be had when it is remembered that the remains of the high altar lay beneath 115 cubic yards of rubble and debris of destroyed roofs and masonry vaults!

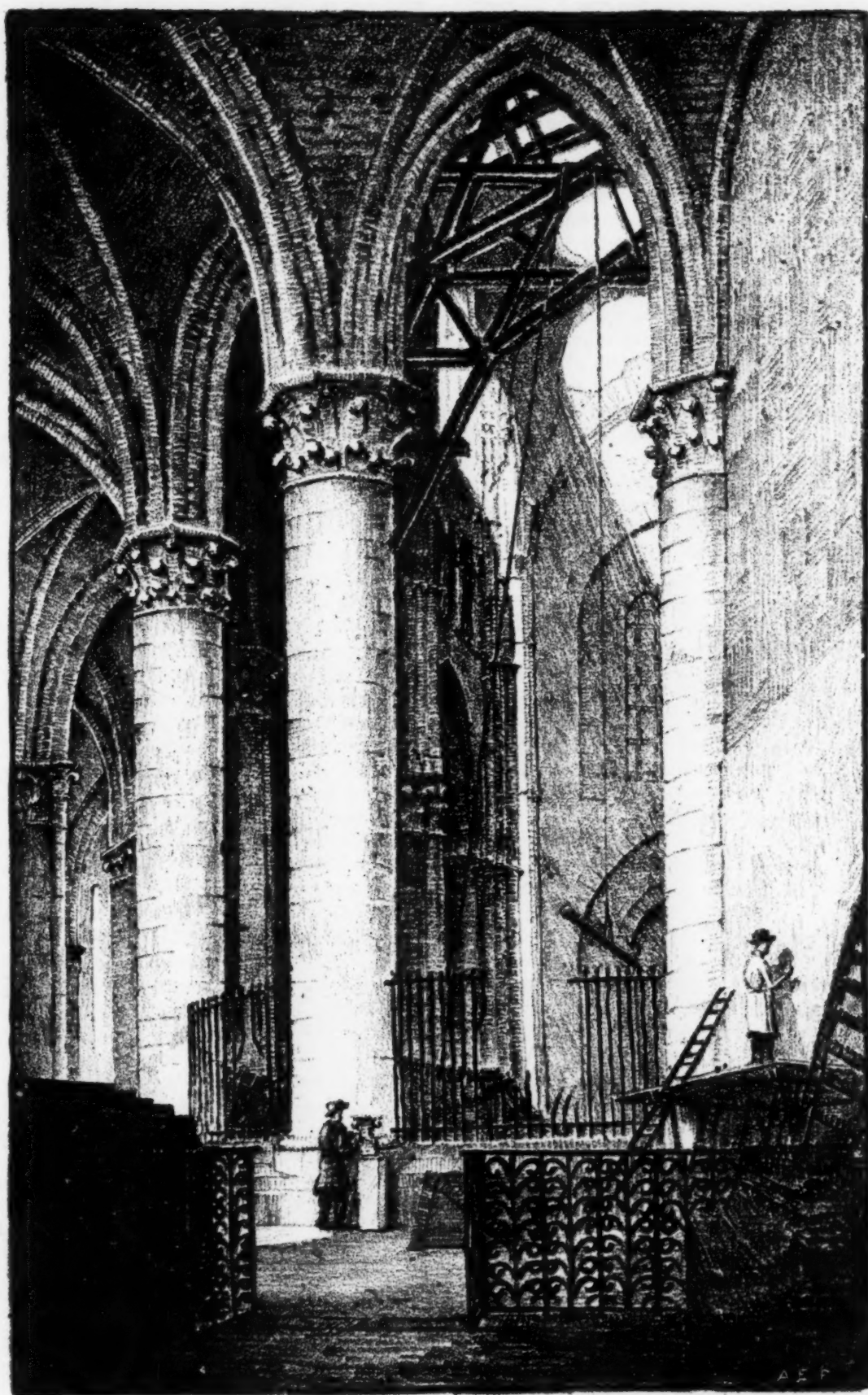
Before the actual rebuilding was commenced, a scaffold was erected and gradually moved around the Cathedral. Stone by stone, the damage was estimated and the strength and condition of every buttress, pier, and wall examined and tested. This lasted during the major part of 1920, and only at the end of the investigation was it evident that restoration could be successfully carried out. The north aisles of the choir and two of the radiating chapels were damaged less than the rest of the structure. This part was early turned into a temporary and all too insufficient place of worship. A wooden ceiling was built across the north transept at the level of the aisle vaulting; a stone wall, erected between the piers of the choir, shut off the ruins of the apse; one of the chapels of the *chevet* became a sacristy; and for several years this restricted space was all that the people of Reims could use as their cathedral church. The need of a larger place of worship was imperative. The nave having suffered less than the choir, it was decided to begin the actual restoration on that portion. The work here would be less difficult, it would train the builders for the more arduous tasks to be undertaken elsewhere, and, if a success, would act both as a proof that complete reconstruction was possible, and as an incentive to obtain possible donations toward the continuation of the work.

Making use of the old materials wherever possible, work was started under cover of the temporary roof, holes torn by shell fire were repaired, and today the vaults are complete. The windows, with their mutilated tracery carefully replaced, have been glazed, other scars have been removed, and in a short time the nave will again be turned into a sanctuary. Sculptured capitals and ornament have been repaired with a skill that is

almost incredible. This was largely made possible through the efforts of one man, M. Havot, who for nearly 60 years had worked on and cared for the sculpture of the Cathedral. During his long years of service he had acquired a knowledge of the carvings without which many mutilated bits of stone would never have been returned to what were their original positions. In the days when the church was a deserted ruin, the old man moved about his Cathedral, carefully collecting the fallen fragments of the sculptures he had loved and tended so long. In most instances he was able to recognize and classify what he saved, though much will forever remain unidentified. The Cathedral in its darkest hours was not without its picturesque figures. Future generations will owe much of their enjoyment of what remains to them of these great Gothic sculptures to that solitary man, wandering about the ruined church and desecrated sanctuary, reverently collecting the bits of stone and painstakingly classifying them, moved always by the hope that they might some day take their places again in the harmonious whole. This hope has been largely realized.

On the main facade there are statues that may never be restored. Whether their restoration should be undertaken at all is an unsettled question. Over the entire west front much damage was caused by shell fire, but of the three portals, that to the north suffered most, for during the fire of September, 1914, heat from the burning scaffold calcinated its statues and decoration almost beyond recognition. Another scaffolding has been erected about this door, but no restoration is being attempted. What remains is merely being protected from the weather. The rest of the facade will probably be treated in the same manner. Fearing that another calamity might possibly occur to Reims in the future, it has been suggested that such statues as the famous Angel of Reims and the King David be removed to safety in a museum, and their places filled by skillfully made copies. It is to be hoped that this course will be followed.

Of the marvelous glass only a small portion remains, and no one window in entirety. Late in 1917 what remained of the old glass was moved to a secure place. To accomplish this no scaffolding could be erected for fear of drawing fire from the Germans, stationed within easy range of the Cathedral, on the hills outside Reims. Workmen, clinging to rope ladders fastened to the cornices, laboriously removed what was left in the windows. The windows of the clerestory were formerly filled with some of the best glass of the late thirteenth century, a period which produced glass that has never since been equaled in either color or design. In the restored nave all but eight of the clerestory lights are glazed in plain "cathedral" glass. The four windows nearest the crossing, two on each side, protected as they were by the transepts from the heaviest bombardments which came from the east, were least damaged, and have been restored. The two next these, despite partial destruction, have been



RESTORING REIMS CATHEDRAL
FROM A SKETCH BY ALFRED E. POOR

pieced out with fragments, and the pair of adjoining windows will be filled with mosaic made up of debris. But the jeweled light of the remaining windows is lost forever, reduced almost to dust that was irretrievably mixed with stones that lay along the walls.

It is not, however, the intention of the restorers that, contrary to the conception of the first designers, the nave of Reims shall always be illuminated by a cold, hard light. A Gothic cathedral without its glass is incomplete and dead, with only a suggestion of the mystery and sanctity it should possess. So as time and resources allow, the remaining windows will be filled with colored glass, erected, it is hoped, chiefly as memorials. Any modern glass that is put in will have to conform strictly with the character of the old, in feeling, color, and design. The restoration of the great western rose is already a possibility. In 1908, this window was carefully repaired and strengthened by M. Paul Simon, a descendant of many generations of Remois glass painters. Fortunately, M. Simon's drawings and colored sketches made for this work were saved, and the replacing of the window according to them will be turned over to his son, M. Jacques Simon, a skilled glass worker.

One cannot realize without emotion that the Cathedral is being restored largely by the people of Reims, by men who have lived under the protection of its soaring mass, and loved it from early childhood. Many of the workmen are Remois; there are M. Havot and M. Simon, but above all, that personality which is guiding the entire work, M. Henri Deneux, the architect in charge. Thanks to him, this great church retains unimpaired the spirit and atmosphere given it by its builders. Never has an edifice of the middle ages been handled with greater respect, nor has the hand of a restorer been more loving and skillful. Had the four corners of the earth, instead of France alone, been searched for an architect, there could have been found none more suitable than this man with iron gray hair and beard, and a bit of the tragedy of Reims forever in his eyes, who, with slow step and low voice, moves about his Cathedral, supervising its rebuilding. M. Deneux was born in Reims, and in the truest sense of the word received his education in the Cathedral. He was apprenticed at an early age to an architect of Reims, and has spent a large part of his life in the service of the *Commission des Monuments Historiques*. During many years he did considerable work on the Cathedral, acquiring a minute knowledge of its details and construction. His great ambition is to restore it to the condition he knew when he loved it in his childhood. Due to this love, the work is being done by methods best calculated to

preserve the character and individuality of the building, and to thus bequeath it intact to posterity.

With us in America things would doubtless proceed more rapidly. There would be the whir of modern machinery, the bellowed orders of foremen, blowing of whistles, screeching of steam cranes, noise and endless confusion. But, instead, the nave of Reims has all the atmosphere of the studio of an artist rather than that of a great workroom. The work goes on slowly and carefully, in the manner of the builders of old, when every man labored for love of his art and the glorification of his religion, rather than for his hire. Here skilled stone cutters bend over blocks of stone, carving by hand details that at saving of time and expense might be finished by machinery. But in doing this the stone is given that living quality which steam and electricity can never impart, and the re-born Reims is being spared that ready-made, cast-iron Gothic look, which we, alas, see only too often in America. Americans may feel some justified pride, however, in this great church, now slowly rising from its ashes. Of Mr. Rockefeller's generous gift of a million dollars toward the restoration of the historical buildings of France, three hundred thousand have gone to the rebuilding of the roof and fleche of Reims, a gift equaled in value only by the appropriations of the French government. Approximately two millions of francs have been received from other sources, a considerable amount being made up of the donations of visitors to the Cathedral. But only about one-tenth of the one hundred and forty-four millions of francs necessary, it is estimated, for a complete rebuilding has been subscribed, after several years of effort!

The work must not cease here. There is an almost incredible amount of restoration yet to be done. As one enters the west portal of the Cathedral now, and stands at the barrier which restricts the visitor to an area at the end of the nave, the rough stone wall built across the church at the transepts and reaching to the very crest of the vaulting cuts off the sight of the once glorious choir and apse. Where once a varied splash of color met the eyes, as they were raised to the clerestory, the sunlight filters coldly through greenish glass. For many years, no doubt, that blank wall will rise before the worshipers in Reims Cathedral. Behind it there is reconstruction that will take infinite labor and care. But in the end the innate artistic sense of the French, together with their unquenchable enthusiasm and spirit, will accomplish the task. Over the city and its surrounding valley, Notre Dame de Reims will again rise in all its former splendor, a queen among Gothic churches, and the admiration of the civilized world.

Limitations in Remodeling an Asset to Style

A COUNTRY HOUSE AT CHESTNUT HILL, PHILADELPHIA

EDMUND B. GILCHRIST, Architect

By HAROLD DONALDSON EBERLEIN

THE limitations inevitably attendant upon any process of architectural remodeling are to be accounted opportunities to be embraced rather than regretted as vexatious obstacles one would gladly be rid of. Paradoxical as it may seem to make such an assertion, the fancied contradiction is more apparent than real, as we shall see if we pause to give the matter a little thought. Limitations, whether self-imposed or accepted from sheer necessity, always filip the imagination and supply a wholesome stimulus to inventive ingenuity. After that the success of the outcome rests largely upon the reactions set up in the minds of architect and client. There is the whole story presented in a nutshell.

Much more might be added by way of amplifying and elucidating the view just expressed, which is really not unduly optimistic; but, until we have closely scrutinized an apt example for the purpose of concrete illustration, it will be better to reserve further comment on this score as an apposite conclusion. This apt example is ready to hand in the house at Chestnut Hill, near Philadelphia, recently remodeled and enlarged by Edmund B. Gilchrist. The remodeling, it is true, was so drastic and so far-reaching that it might almost be called a new creation. The structure today bears little resemblance to the house as it was before it underwent what might not inappropriately be termed several major operations of architectural surgery. Nevertheless, the process was in very truth a remodeling in that sundry limitations, inherent in the fabric of the original building, were scrupulously respected, and these limitations were converted to such happy purpose in the newly constituted ensemble that their restrictive quality has altogether disappeared. How felicitous has been the outcome may be judged from accompanying illustrations upon these pages.

Without any desire to be ungracious or to asperse the taste and abilities of the architect responsible for the house as it stood prior to the changes lately wrought, it is in order to say that

it truly represented the prevalent manner of the "nineties," when it was built, and that, as a good interpretation of the domestic architectural ideal then current, it satisfied the taste of both architect and client. Judged by standards of the period, it was a creditable performance, and it would be manifestly unfair to apply to it the yardstick of our present preferences, in view of the improvement in taste.

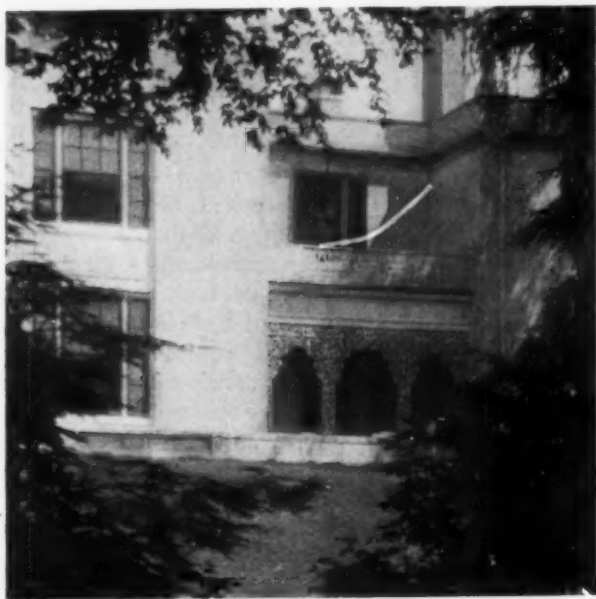
But a great deal of water has flowed under the bridge since the nineties. What might have passed muster then very readily as an embodiment of exalted architectural excellence, might now be looked upon as little less than a positive eyesore. The nineties were too near the welter of Victorian complexities and muddled perversions for us to expect any of its exponents, save those endowed with the keenest perception of fundamental verities, to apply such tests of severe discrimination as would effectually guard them from the applauded follies of the moment. Since then understanding of fundamental principles has increased apace; popular taste and sound judgment in matters of architectural design, however much they may leave still to be desired, have advanced by leaps and bounds, and the present average sense of discrimination would no longer tolerate what was regarded not so many years ago with almost universal approval. So it was with the house in question.

It is not necessary to enter here into a discussion

of the aspect the structure presented when remodeling was begun. Suffice it to say that the whole situation was critically studied in a spirit of perfect fairness. There was no disposition to indulge in wholesale condemnation. On the contrary, every consideration was carefully and impartially weighed; every effort was made to discern whatever might be intrinsically good,—however obscured or discounted by existing environment,—with a view to its possible retention, and conditions that eventually took shape in the course of this judicial survey were frankly accepted for incorporation in the new scheme. Such limitations as the mass of

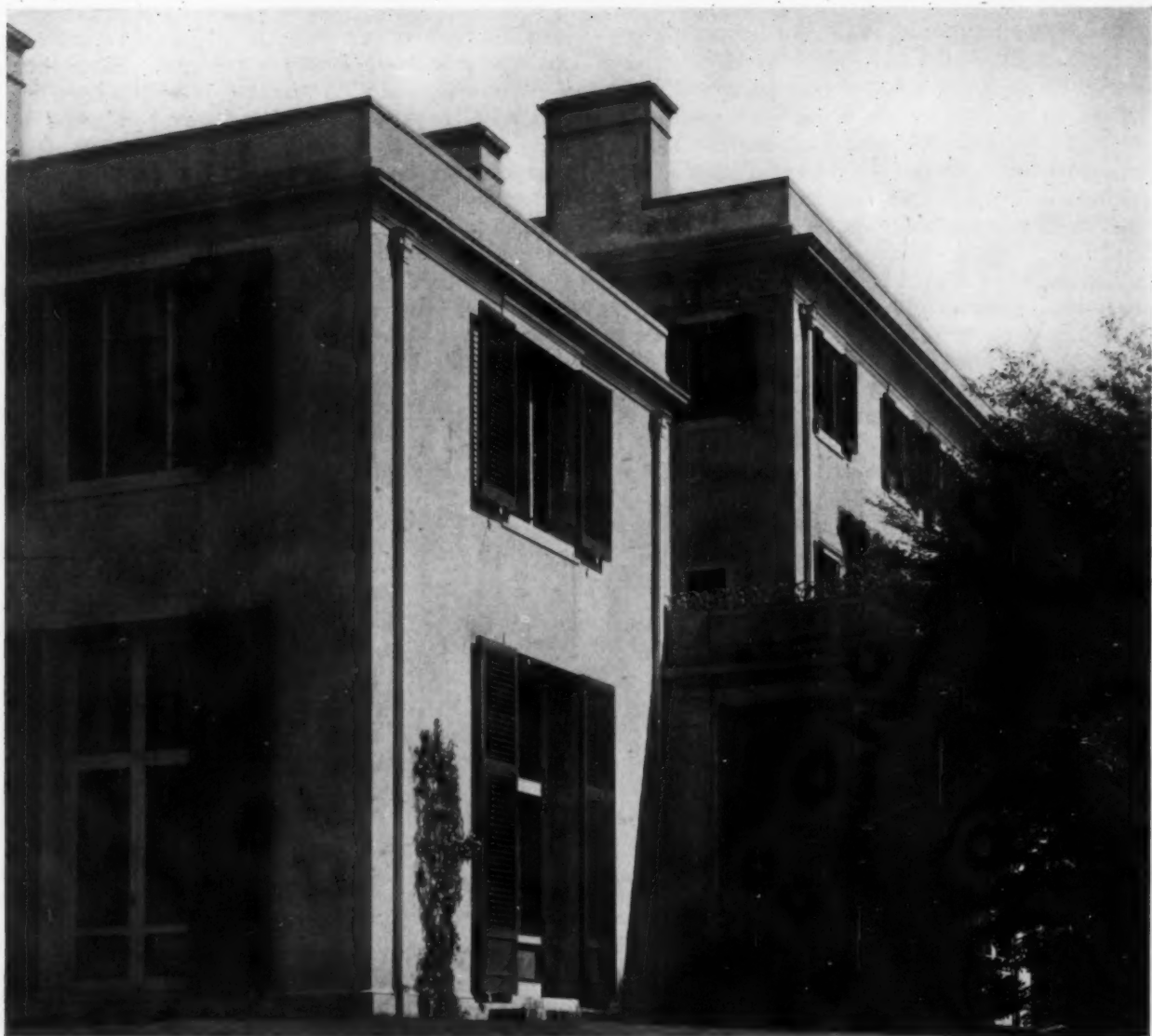


The South Front



Veranda on North Terrace

the building, the fenestration of the south or garden front, and a number of other items were deliberately adopted as essential determining factors to be made use of in the fresh composition, although one can well understand how they might easily have been regarded as trammels to be evaded when there was an opportunity of doing so. As a matter of fact, the architect and all directly concerned with the house feel convinced that the acceptance of the limitations has produced a better and more individual result than would have been the case had there been no problem with certain immutable factors to solve. In other words, they recognize the truth that overcoming obstacles is a stimulus to invention, and that difficulties to surmount, if viewed from the right angle, put the designer upon his mettle in a manner that can rarely happen where the road is easy and there is an absolutely open course to designing *de novo*. The opposition of difficulties, in architecture as in everything else, calls forth the most substantial and enduring results. The structural opposition of a characteristic "mansion" of the "gay nine-



Southwest Corner, House at Chestnut Hill

ties" called forth the suave composure of a well poised exterior strongly reminiscent of the Regency. Thus may a confronting obstacle, firmly grasped and handled, carry with it the germ of inspiration to annihilate its faults, and this frequently occurs.

Removing the yellow brick face from the south or entrance front may have eliminated an element of offensive color and texture, but it did not alter the placing or sizes of the windows and doors. These have not only been completely reconciled with the spirit of the present composition but have also been rendered distinctly contributory to its effectiveness. The fluted frames of the central group of windows and the breaks in the lower mouldings of the cornice above the windows of the upper story supply features of added interest consistent with the delicacy of the details that distinguish the entrance loggia. On the north front of the main block, where pre-existing conditions left greater freedom for unfettered design, the window treatment is much bolder and exceedingly effective with its clearly defined patterning of penetrations and undisturbed wall spaces.



Veranda of Service Wing



North Terrace, House at Chestnut Hill

While the entire composition is characterized by sobriety and broad simplicity, all the details are noteworthy for their engaging delicacy, their quiet richness, and the judicious restraint and insight with which they have been employed. Of particular charm are the deeply coved cornice and the paneled parapet surmounting it. The whole house, it is true, is so strongly suggestive in its general aspect of Regency manners that we are quite justified in speaking of it as a Regency house, if it be necessary to append a categorical label to its style. It should be noted, however, that there is no meticulous imitation of Regency exactitudes in minutiae of detail, or in anything else for that matter. On the contrary, instead of scrupulous archaeology we find on every hand freedom and freshness of interpretation. The doorway on the north terrace, if one cares to analyze its composition with academic precision, might be classified as a blending of Le Muet's manner with French practices of the late eighteenth century. The iron grilles over the small windows flanking the north doorway are unmistakably seventeenth century Italian in their derivation. The discerning critic might go on indefinitely dissecting the composition and assigning each small detail to its appropriate academic pigeonhole. But there is no point whatever in pursuing such a pedantic and pettifogging

course. It would be like losing sight of the wood for the trees. What really does matter is that the total conception is vital. Every feature of it lives and contributes an appreciable addition to the life of the whole, and that whole eloquently reflects the life of today in its social and economic conditions and in its ideals. That the ensemble so closely coincides with the manner of the Regency in England that we may fitly set it down as a successful revival of Regency style is of no particular significance. Neither is it of any special significance that the details employed can all be ascribed, with more or less exactitude, to readily traceable origins, forming in their sum total a decorous and well digested system of embellishment. It is of infinitely more significance that the house faithfully represents a sane and ordered modern conception of life, and if that conception happens to run parallel in sundry respects and conditions to conceptions of what was becoming at the time of the Regency, the resemblance is of purely incidental interest and might be assigned a place in the pleasant and harmless speculative limbo of likenesses in cause and effect. The response and dignity of this exceptionally felicitous work of remodeling are unbroken by any disturbing incident that might cause a qualifying regret to the observer.

In connection with the details that figure in the



Living Room Fireplace



On the North Terrace

embellishment of this rarely agreeable country house, it is worth calling especial attention to the striking and appropriate use made of early nineteenth century cast iron decorations which appear as veranda garnishings, and also in the form of veranda and terrace chairs, settees and tables. Previous to the remodeling, the owner had collected a considerable quantity of old floriated cast iron from houses in course of demolition. Some of it is still being manufactured, and with the modern product it was possible to make up the required number of chairs, tables and settees. The grape-bunch turn-buckles for the shutters are likewise attributable to foresight in rescuing them from the hands of the house wrecker.

This substantial recognition of the merits of and the suitable employment of cast iron ornament is significant on several counts. In the first place, it is a step toward the vindication of a type of decorative metalwork of which we still have a goodly quantity left and crying out for preservation, notwithstanding the enormous amount that has been destroyed as scrap iron,—a type that has too long suffered undeserved obloquy under the common impression that it was only a meretricious Victorian product not worth bothering about. Without any disparagement to the just claims of wrought iron, we submit that cast iron of good design has also

its appropriate place and uses and that it ought to be impartially judged for its own distinct and separate worth, and not subjected to unfair comparisons and consigned to contempt under the blanket "Victorian" condemnation. The place given it in the enrichment of the house before us is encouraging and shows intelligent perception. In the second place, the presence of cast iron in the early nineteenth century manner exemplifies the owner's contention that it ought to be, and is, possible to find stock products of industrial or commercial art wherewith to grace domestic architecture without being compelled to have recourse to specially designed fittings and adornments. So far as this particular instance is concerned, at least, he has proved his point.

Last of all, the recognition of the value of cast iron so clearly set forth in the accompanying illustrations is symptomatic of a commendable and increasingly popular attitude toward things Victorian. Time was, not so very long ago during the analytical era of "period purism," when it was the almost universal habit to condemn unreservedly everything Victorian, early, middle or late, without pausing to sift the gold from the dross and to inquire whether there might not here and there be something intrinsically good that ought to be saved. Now that we have come to a synthetic era of miscellaneous combination,



In the Breakfast Room



Stair Hall Detail

when many tread with surer step and are not afraid to exercise discrimination, we are disposed to adopt a more judicial attitude and are willing to appraise each feature for its own merits, irrespective of the "period" to which historically it belongs. Hence the salvaging of good Victorian inventions; many were unquestionably bad and altogether worthy of the condemnation meted out to them. The early Victorian cast iron was one of the good features.

The veranda-like projections from the south front have been very pleasantly treated as rooms,—one of them a breakfast room,—with an exceptionally large area of window space, so that their veranda nature is not painfully obtrusive. And speaking of window spacing and sizes, it is not amiss to note the serenity of the living room, due in great measure to the few large windows that admit a flood of light and yet leave the uninterrupted wall surfaces so necessary to

the repose of a room and essential for its furnishing.

Reverting once more to the stimulating quality of limitations in remodeling, after scanning the illustrations of the house at Chestnut Hill one can see that the acceptance of certain unalterable conditions has not only not militated against vitality of composition but has even aided the logical working out of an interesting scheme. The limitations, so to speak, set the theme for the composer to elaborate. The great dramatists of the golden age of French literature closely bound themselves to the observance of the "unities," and the sparkling coherence and lucidity of their work can be largely attributed to the restrictions by which they chose to limit their writing. The same principle of limitation may apply with equal felicity in the case of architectural remodeling, as we have seen in the instance before us, and prove not a hindrance but a help toward success.



North Front, House at Chestnut Hill
Edmund B. Gilchrist, Architect

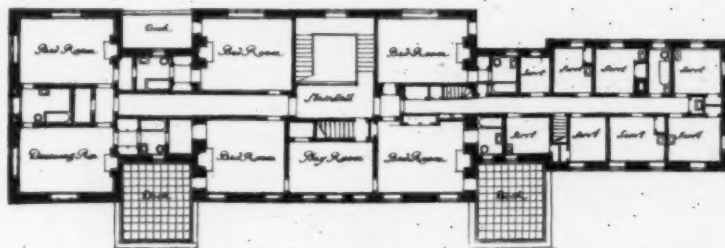


Drawing of Loggia on Back of Plate 51

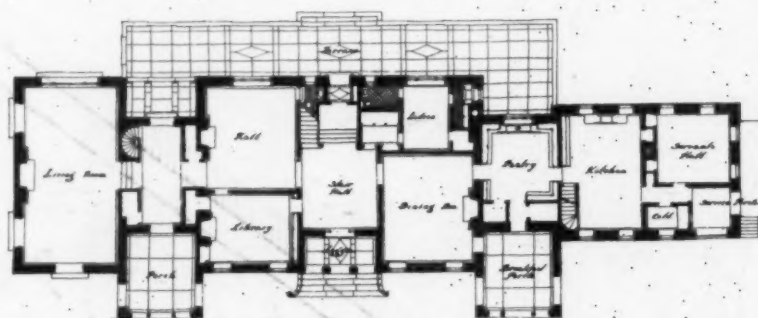
ENTRANCE LOGGIA, HOUSE AT CHESTNUT HILL, PA.

EDMUND B. GILCHRIST, ARCHITECT

Plans on Back



SECOND FLOOR



GROUND FLOOR

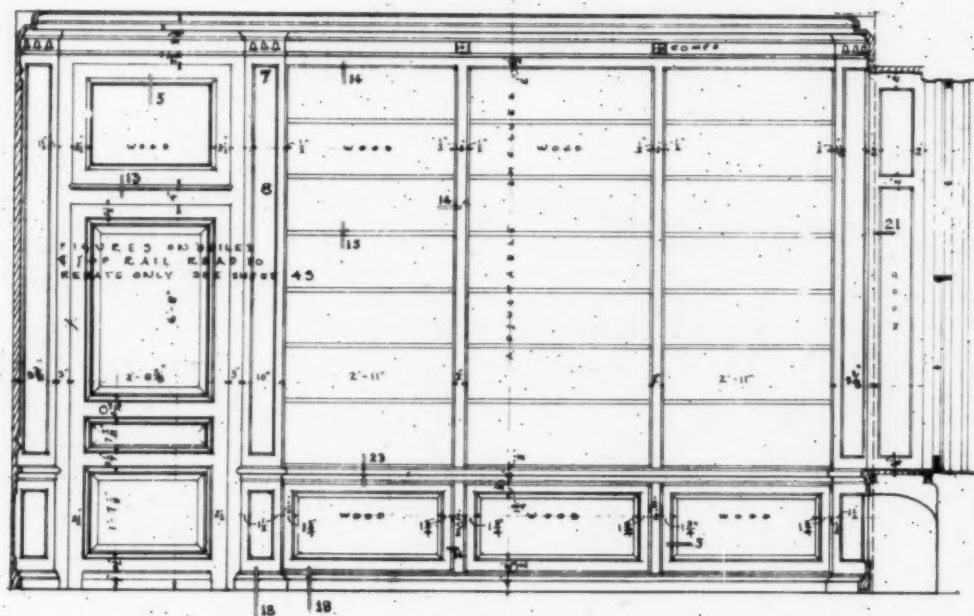
PLANS, HOUSE AT CHESTNUT HILL, PA.

EDMUND B. GILCHRIST, ARCHITECT

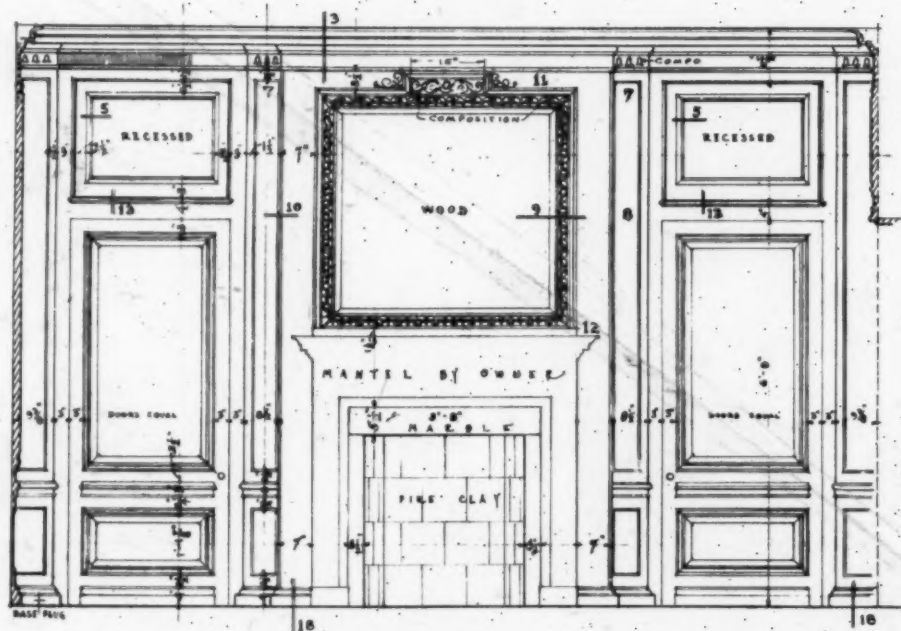


CORNER OF LIBRARY, HOUSE AT CHESTNUT HILL, PA.
EDMUND B. GILCHRIST, ARCHITECT

Measured Drawing on Back



SECTION CC



SECTION DD

DETAILS IN LIBRARY, HOUSE AT CHESTNUT HILL, PA.
EDMUND B. GILCHRIST, ARCHITECT

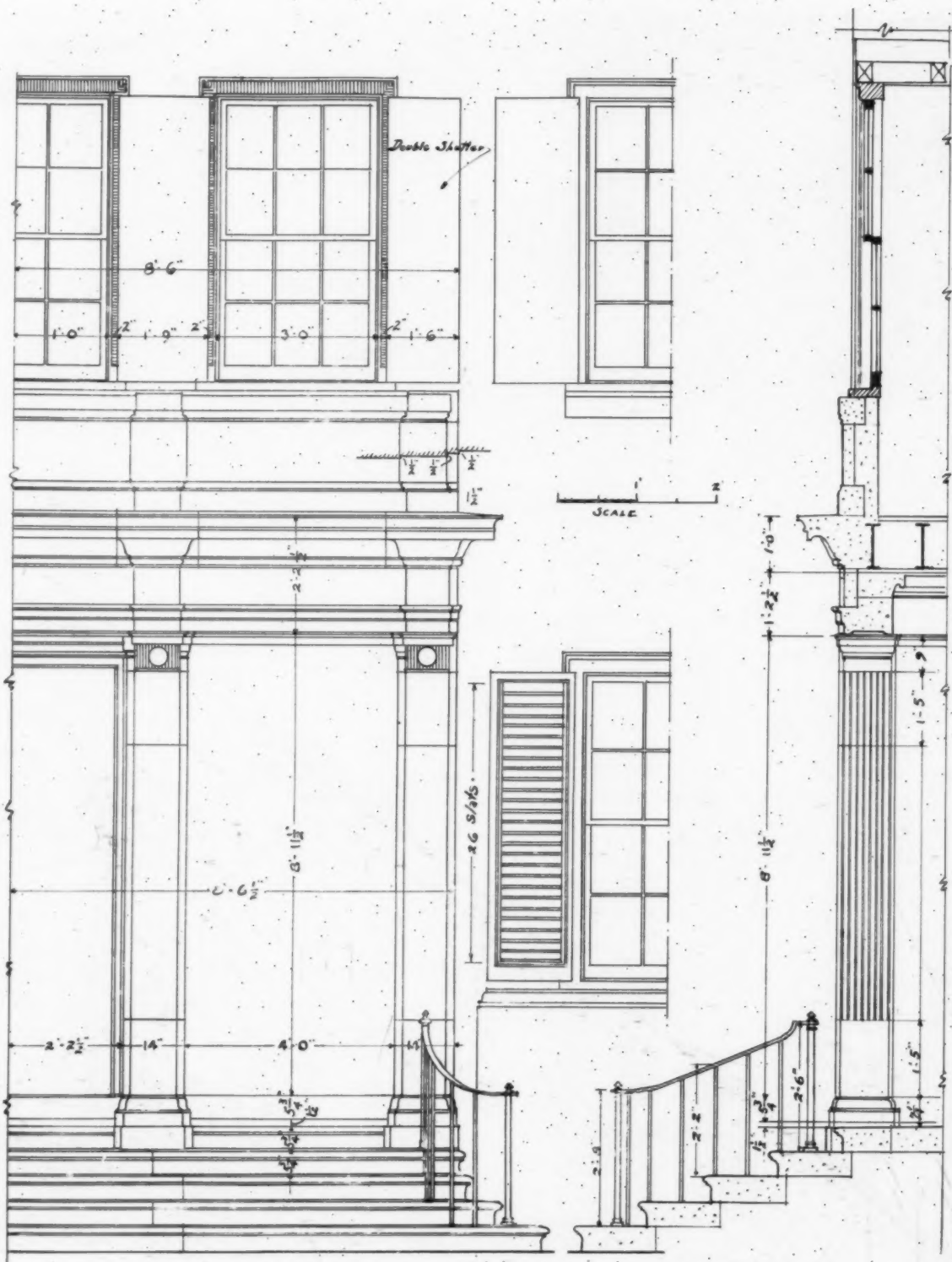
OCT
1926

No
7

The ARCHITECTURAL FORUM DETAILS



LIBRARY FIREPLACE, HOUSE AT CHESTNUT HILL, PA.
EDMUND B. GILCHRIST, ARCHITECT



OCT
1926

ELEVATION

SECTION

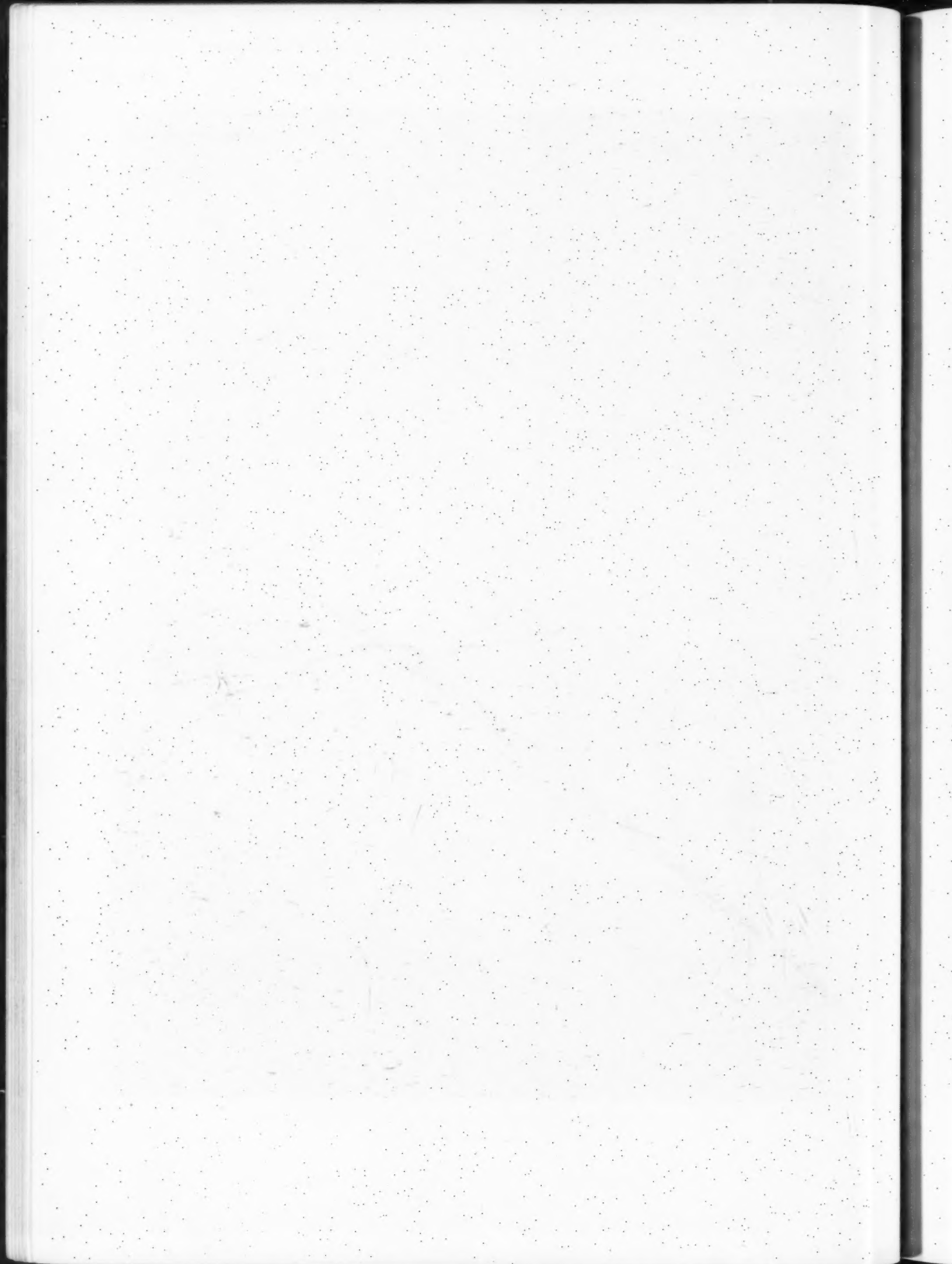
DETAILS OF ENTRANCE LOGGIA
HOUSE AT CHESTNUT HILL, PA.
EDMUND B. GILCHRIST, ARCHITECT

NO.
8

The ARCHITECTURAL FORUM DETAILS



DINING ROOM FIREPLACE, HOUSE AT CHESTNUT HILL, PA.
EDMUND B. GILCHRIST, ARCHITECT

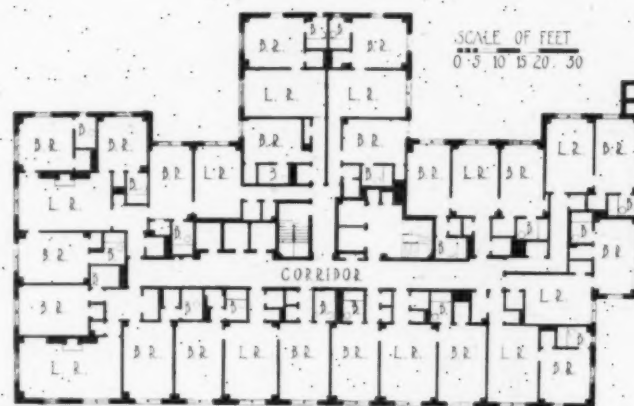




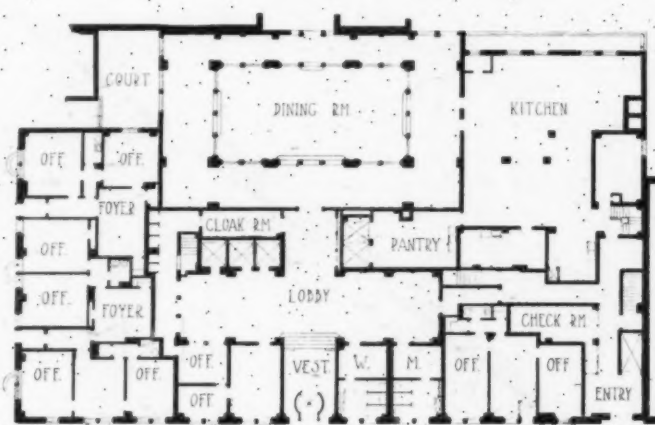
Photos. Amemiya

MAYFAIR HOUSE, NEW YORK
J. E. R. CARPENTER, ARCHITECT

Plans on Back



A TYPICAL FLOOR



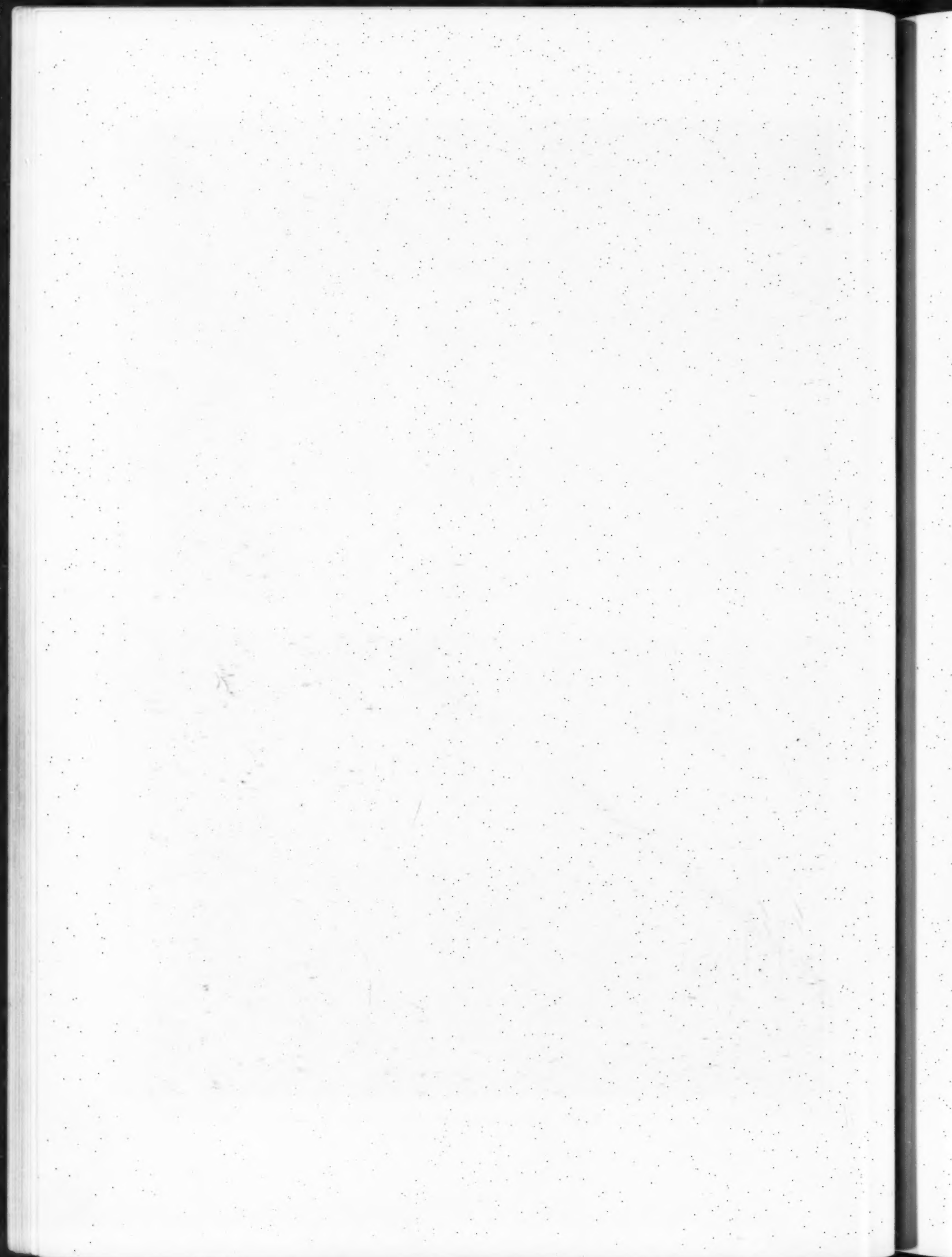
MAIN FLOOR

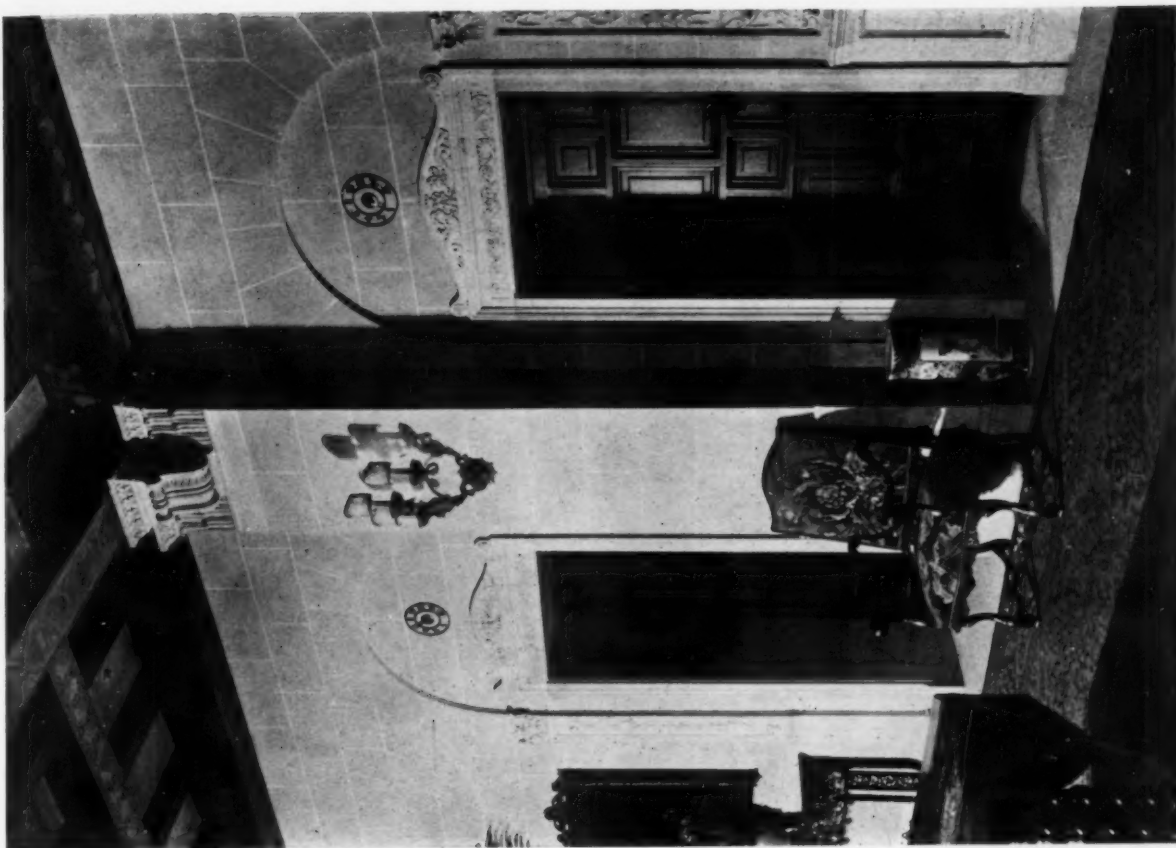
PLANS, MAYFAIR HOUSE, NEW YORK.

J. E. R. CARPENTER, ARCHITECT.

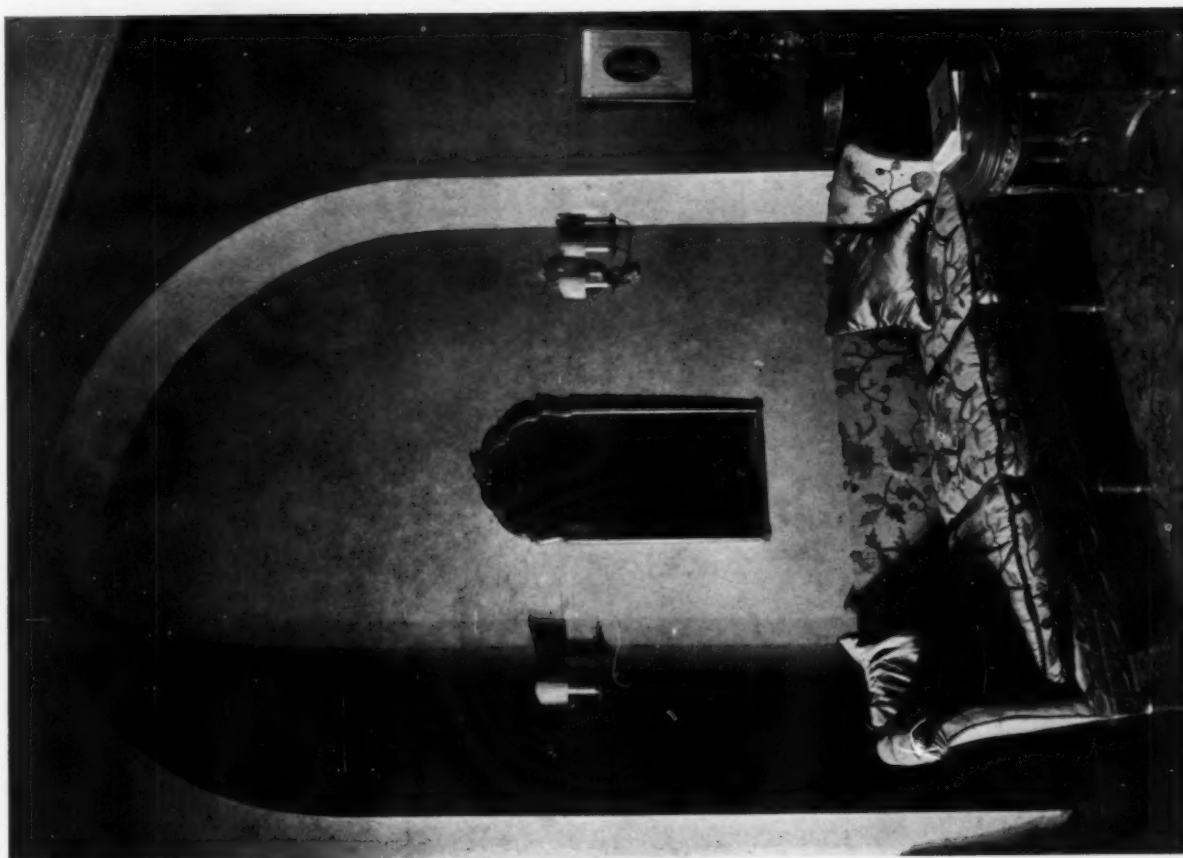


THE DINING ROOM, MAYFAIR HOUSE, NEW YORK
J. E. R. CARPENTER, ARCHITECT



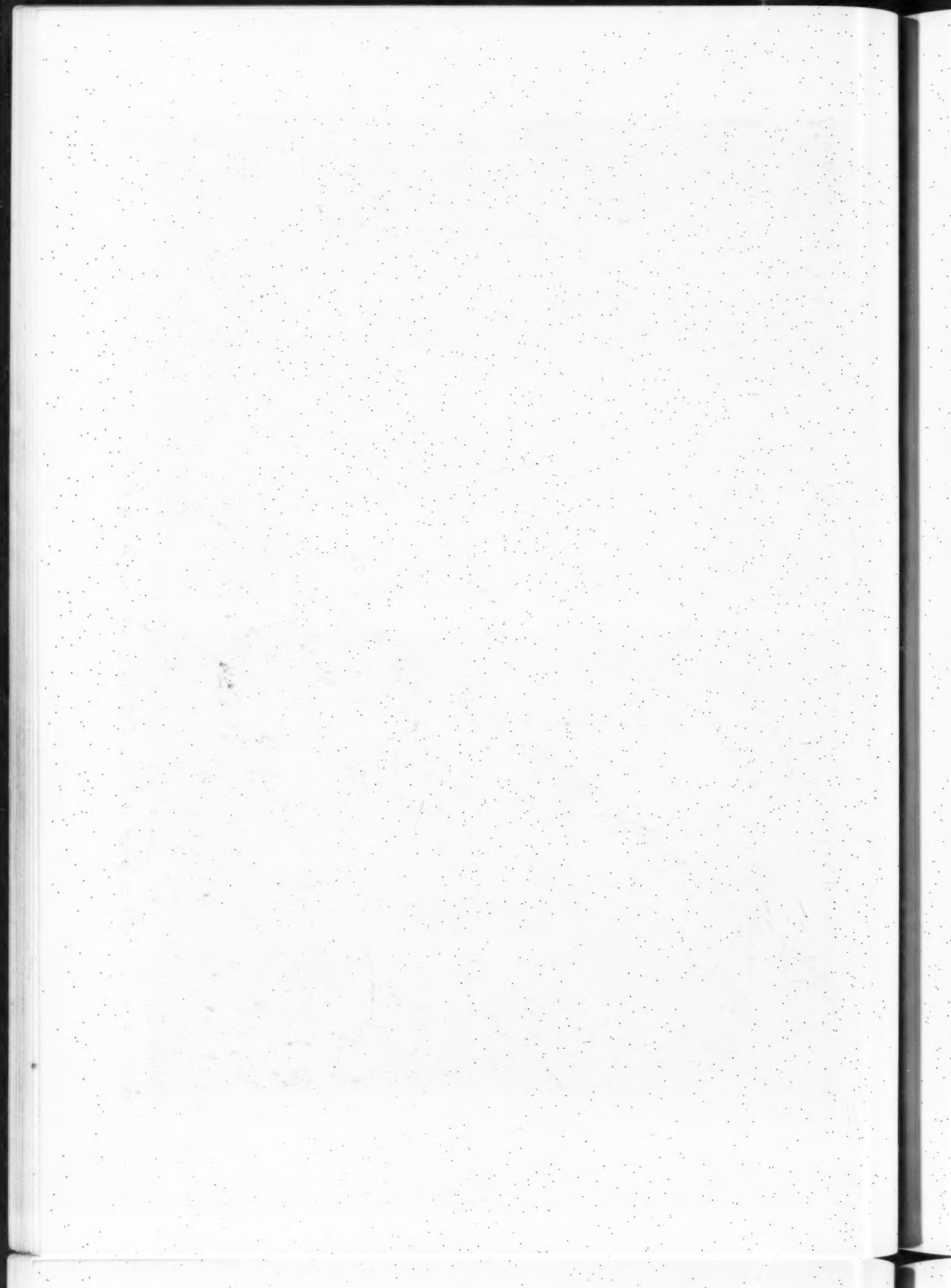


ELEVATOR DOORS



IN THE LOUNGE

INTERIORS, MAYFAIR HOUSE, NEW YORK
J. E. R. CARPENTER, ARCHITECT





THE LOBBY, MAYFAIR HOUSE, NEW YORK
J. E. R. CARPENTER, ARCHITECT

Bank Alterations

By HORACE S. LUCKMAN

WHEN the business of a bank increases to such an extent that radical changes have to be made in order to provide more space for its various departments, one of the most perplexing of the many problems that present themselves is that of carrying out the work so that the regular routine of business is not interfered with. It sometimes happens that temporary space can be obtained in an adjoining building, in which case it is a comparatively easy matter to fit this area up with temporary fixtures and have the banking equipment transferred thereto over a week end. More often however, it is required that existing departments be enlarged, thus necessitating the removal of certain departments to a different part of the premises and careful management of their requirements.

In either case certain fundamental principles have to be observed. "Security First" must be the watchword at all times. In arranging for temporary quarters or conditions, money and securities, whether being transferred to various departments or kept therein, must be so protected that there can be no danger of their being lost or mislaid. Small apertures where a check could slip through to the back of a counter must be carefully sealed in the temporary equipment, just as in the permanent structure; proper and convenient contact must be maintained between the officers of the bank and the various departments. Passageways must be amply lighted and guarded so as to ensure the safety and convenience of depositors during banking hours, and the premises must be properly enclosed at night in such manner

as to render them reasonably safe and secure. For this reason it is necessary, before commencing operations, to formulate certain methods of procedure, outlining in detail the manner in which the different departments of the bank are to be transferred to or housed in one part of the premises, while the work of remodeling is proceeding in another; also how, when, and where temporary partitions are to be erected and re-arranged, materials delivered, and access to stairways, elevators, and exits maintained.

The American Trust Company, with which is affiliated the New York Title & Mortgage Company, maintains, in addition to its main offices at 135-141 Broadway, New York, branch offices at 41st Street and Madison Avenue; Montague Street, Brooklyn; Long Island City; Jamaica, L. I.; and will shortly open an office at St. George, S. I. The rapid growth of this institution has rendered it necessary to make extensive changes in practically all of its offices at various times. The most recent of these has lately been completed at its main office, 135-141 Broadway, where entire rearrangement and extension of its quarters have made it one of the most attractive banking rooms in the financial district. It ranks as an unusually successful alteration.

The old banking room at 135 Broadway was confined to a space on the main floor about 24 feet wide by 140 feet long, the only entrance to the bank being obtained through the main elevator hall of the building. This hall gave direct access to the main concourse of the bank, so that the tellers' cages and officers' quarters were arranged along the outside



Main Concourse, American Trust Co., 135 Broadway, New York

Horace S. Luckman, Architect



Officers' Space, American Trust Co., 135 Broadway, New York

or southerly wall. In the new arrangement this has been entirely reversed, and the public concourse placed along the outside wall with a direct entrance to it from Broadway, not only giving better light and ventilation for the cages on the inner side of the room, but also making a far more attractive and efficient banking layout. It has proved to be convenient.

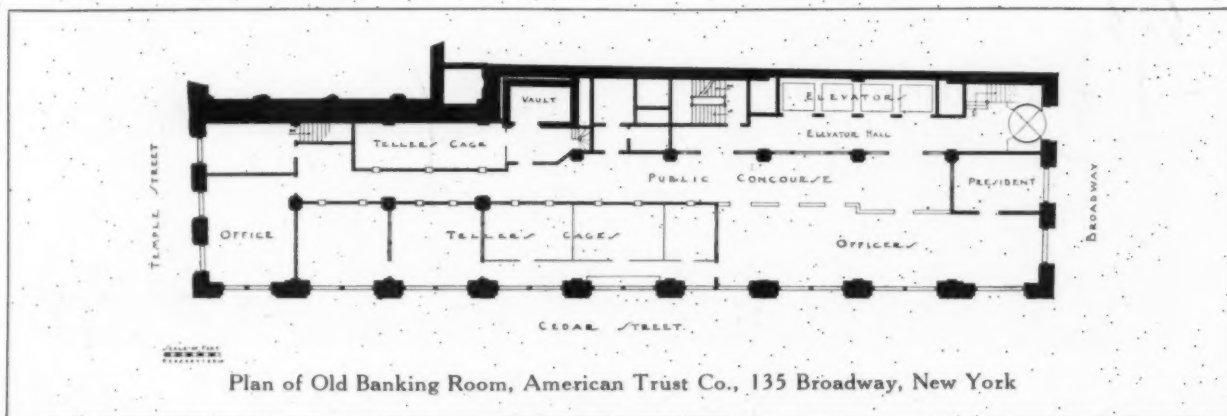
In order to obtain increased floor area it was decided to break through to the rear portion of the adjoining building so as to extend the room around to what is now called the Liberty Street end. The manner in which the alterations had to be carried out without interfering with the business of the bank presented an interesting problem. The Liberty Street end was fitted up with temporary cages and officers' quarters, and the large openings which were eventually to be used for connecting the two buildings were cut through. The old quarters were vacated on a Saturday, and by the following Monday morning the bank was installed ready for business in its temporary quarters. In the meantime a temporary passageway had been provided leading from the entrance on Broadway to this space. The

work of remodeling the Broadway and Cedar Street side of the room was then begun, and as soon as this was completed the bank was again transferred back to this space and the work of remodeling the Liberty street end completed, according to schedule.

The general treatment of the interior is in simple Italian design with polished marble wainscot around the walls, open marble railings at officers' spaces, marble and bronze banking screens, plain plaster walls, and paneled plastered ceiling. The wainscot and railings are of marble with a black and gold marble base; the floor is of a selected colored rubber tile, laid in herring-bone pattern; bronze work of banking screens, president's office and conference room has a slightly oxidized finish to blend with the marble; the walls are painted a soft gray, and the ceilings are finished in old ivory with the high lights of the enrichment picked out in gold. The general effect is of soft tones without any lavish display of color, in fact even the gold is toned down to such a subtle shade that its use is merely employed as a means for bringing out the beauty and scale of the enriched ornament without becoming too prominent.

Another interesting alteration completed a little over a year ago was that of converting the former Thompson residence at the corner of Madison Avenue and 41st Street into a branch bank for the same institution. The interior of this building was of such beauty and elegance that it was decided to maintain the 'original atmosphere' as far as consistent with the requirements of the bank. The original structure consisted of the main portion of the house, extending back about 50 feet on 41st Street with a three-story extension in the rear. The general arrangement was similar to that of the usual American basement residence, with entrance hall on the first floor and stairs leading to a reception hall, drawing room, and dining room on the second. The exterior of the building was entirely faced with Indiana limestone and possessed a most dignified appearance.

In order to make proper arrangements for the bank, the rear extension was removed and the main building extended back to cover the entire plot; the old stone facing was thoroughly cleaned by a sand-blasting process, and the new stone carefully selected so that it is almost impossible to tell where the old



work ends and the new begins. The interior was dismantled, and all materials which were to be re-set or re-used were stored for safe keeping. A portion of the second floor was cut away, the remaining portion forming a mezzanine balcony over the tellers' cages, this space being used by the officials of the bank, giving at the same time architectural dignity.

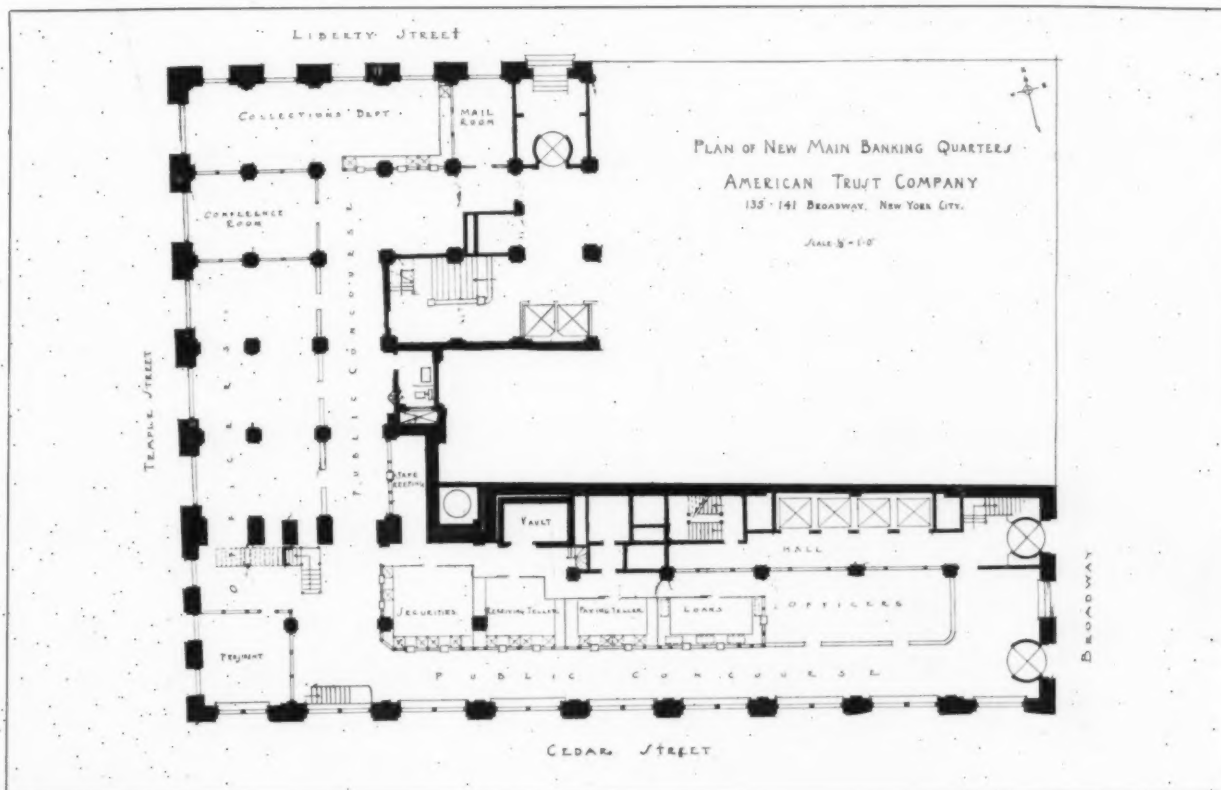
The original oak paneling on the walls of the billiard room was remodeled and re-used for the first floor portion of the banking room, and the banking screen, which was executed in oak and bronze, enclosing tellers' cages, was designed to match. A new curved stairway leading to the mezzanine balcony was built, and the bronze balusters of the original stairway re-used for these stairs as well as for the railing of the balcony. A carved teakwood newel taken from the original building was also re-set at the foot of this stairway. A carved oak over-door, which originally stood at the doorway leading from the dining room to the reception hall, was re-set at the far end of the balcony, and a large mirror installed for the purpose of giving an air of spaciousness to the room. The original carved teakwood doorway leading into the drawing room from the reception hall was left intact, and a corresponding doorway leading into the dining room was re-set at the front end of the balcony in order to give access to what is now a very well arranged directors' room.

In the alterations required for the Brooklyn office of the American Trust Company, the premises to be remodeled consisted at that time of a two-story store and office building with a street front of classic de-



Midtown Branch, American Trust Co.
Horace S. Luckman, Architect

sign executed in cement stucco. The floors were of wood construction, so that a series of steel beams and columns had to be installed in order to support the marble banking screens and railings. The new marble staircase leading to the offices on the second floor was supported on a reinforced concrete slab formed with treads and risers and a curved soffit shaped to conform to the run of the stairs. The stucco work of the front was removed, the brick





Stairs to Mezzanine, Midtown Branch, American Trust Co.



Plan, Midtown Branch, American Trust Co., New York

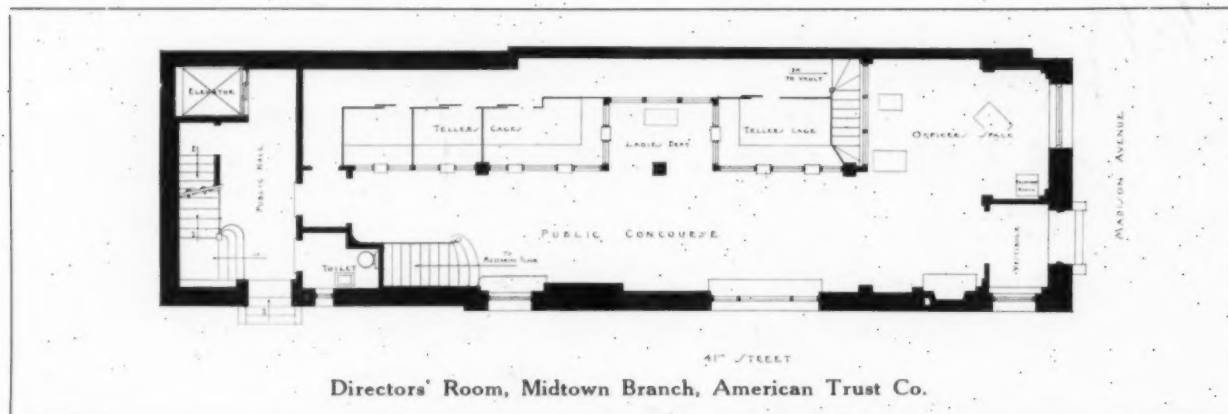
backing cut away for a depth of 6 inches, and an ashlar of marble 5 inches thick built up and securely anchored in place, thus giving an entirely new facing.

The general treatment of the interior consists of marble wainscot, railings, and staircase, marble and bronze bank screens, mottled gray tile floor, and American walnut doors to harmonize with the specially designed walnut furniture of the officers' quarters. The original cast iron columns on the interior were clothed with plaster columns, octagonal in shape, having ornamental caps supporting a paneled and ornamented ceiling appropriate to the place.

The greatest difficulty encountered in this alteration was that of making the new design tie in with conditions as they existed. Due to the fact that some of the existing iron columns were slightly off center, adjustments had to be made to bring the beams of the paneled ceiling into proper alignment with the plaster columns and the marble work of bank screens. In order to do this the bolts securing the steel beams supporting the marble bank screens and railings were set in slotted holes, so that they could be moved in either direction as required. Four columns, which straddled the original stairway in

the center of the building and could not be changed without considerable expense, were made to complete the design of the room by making the entrance to the officers' space between one pair, while the other two were tied together by hanging a handsome bronze clock between them and building around them a check desk required in the banking room.

A reinforced concrete safe deposit vault was built in the rear of the banking room under the roof of a one-story extension of the building. In order to make the vault structure burglar- and fireproof, as well as entirely independent of the building, it was built on its own foundation, the roof of the vault being about 12 inches below the roof of the extension. Above this level an opening was formed in the existing roof and brick walls built on top of the vault forming a parapet about 4 feet high; an additional reinforced concrete roof covered with sheet copper was placed above the vault, thus providing not only double protection at this point but also an air space for the purpose of overcoming the difference in temperature between the air in the vault and that on the outside of the building. Openings were cut in the side walls between the roof of the



Directors' Room, Midtown Branch, American Trust Co.

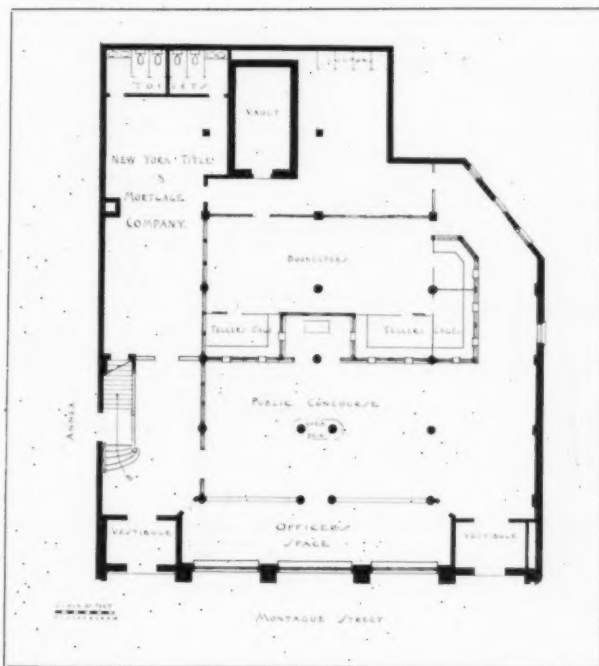


Brooklyn Office, American Trust Co.
Horace S. Luckman, Architect

vault and the ceiling of the extension in order to permit the warm air of the room to circulate through the space between the two roofs of the vault, and a steam pipe connected with two radiator branches was inserted in the space for the purpose of maintaining a fairly even temperature in cold weather.

The same institution is making extensive changes at the present time to its Jamaica office, where a seven-story addition is being erected adjacent to the

present building. In the completed layout the elevators will be moved back into the new building and an additional freight elevator installed as well as an automatic elevator from the banking floor to the safe deposit vaults in the basement; the present entrance hall will be enlarged, and a bronze and glass screen will be installed to divide it from the bank. The present wall between the old and new buildings will be removed for its entire height, thus



Plan, Brooklyn Branch, American Trust Co.



Banking Room, Brooklyn Branch, American Trust Co.

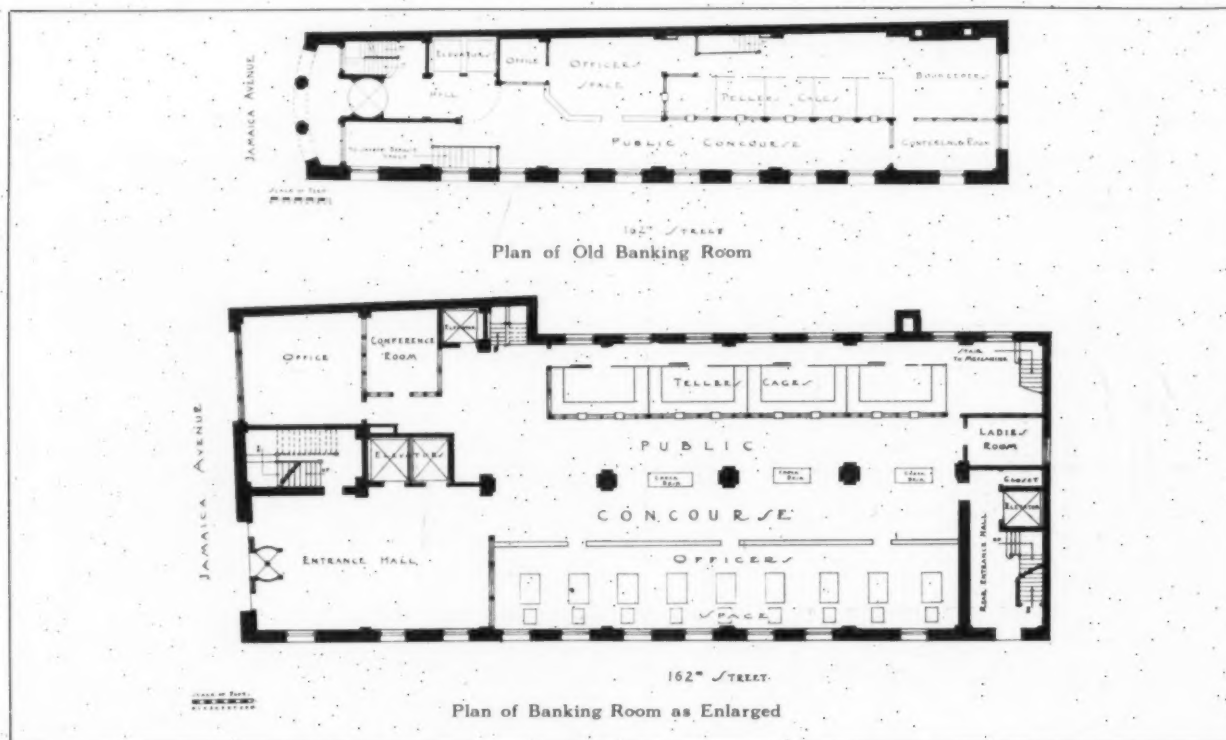
permitting large areas on all upper floors which can be subdivided for offices as required. The bank will occupy practically the entire ground floor, with safe deposit vaults in the basement; the Title Company will occupy the second floor of the building.

The schedule of operations calls for erecting the new addition up to a point where the building is enclosed; the dividing wall will then be removed, and the elevators re-located at different times so that at least one elevator will always be in service while the other is being installed. The new side of the banking room will be entirely completed and the bank temporarily transferred thereto while the present equipment is being dismantled and the remaining portion of the room being completed; a temporary entrance will also be provided leading directly into the new side of the banking room while the present entrance hall is being remodeled. New stairways and lavatories will be installed, so that proper means of egress and wash room facilities are at all times available. These various operations will be worked out according to a pre-arranged and definite schedule.

In the matter of awarding contracts, the interior marble, bronze work, electrical work, counter work, painting and decorating have generally been kept separate; in this way it has been found that a better understanding of the requirements of the architect is formed by specialists in these particular trades. Stock sections of some of the bronze manufacturers can be readily adapted in various ways; details, designs, and finish of marble work can be more easily worked out; materials for finished flooring can be more carefully selected or changed if desired; elec-

tric outlets and equipment can be modified, arrangement of counters and pedestals can be more accurately determined so as to conform to the requirements of each department; and a better color scheme can almost invariably be secured by working with a decorator who is familiar with the ideas of the architect. In these ways, too, the cost of the operation can be kept down to a minimum without in any way sacrificing the beauty or dignity of the design.

In conclusion it might be mentioned in connection with alterations of this character, that a great deal of time can be saved and mistakes avoided by making a careful survey and taking accurate measurements of the premises before making drawings for the new work. Existing walls and partitions are not always parallel or at right angles to one another; column centers may vary so that marble and bronze have to be manufactured accordingly. The floor construction, if of wood, should be carefully examined to see whether the ends of beams bearing in the walls have been seriously weakened through dry rot; floors may be out of level and the low points have to be raised; all plumbing, steam, or water pipes coming at inaccessible positions above or adjacent to safe deposit vaults should be diverted; rear windows and skylights should be protected by heavy iron grilles; in fact each particular job will present difficulties which are not necessarily met with in the design of a new building. They should, however, in no way affect the carrying out of the work in a satisfactory manner, if provided for at the right time, and such planning is one of the parts of an architect's service.



Plans, Before and After Alterations, Jamaica Office, American Trust Co.
Horace S. Luckman, Architect

THE BUILDING SITUATION

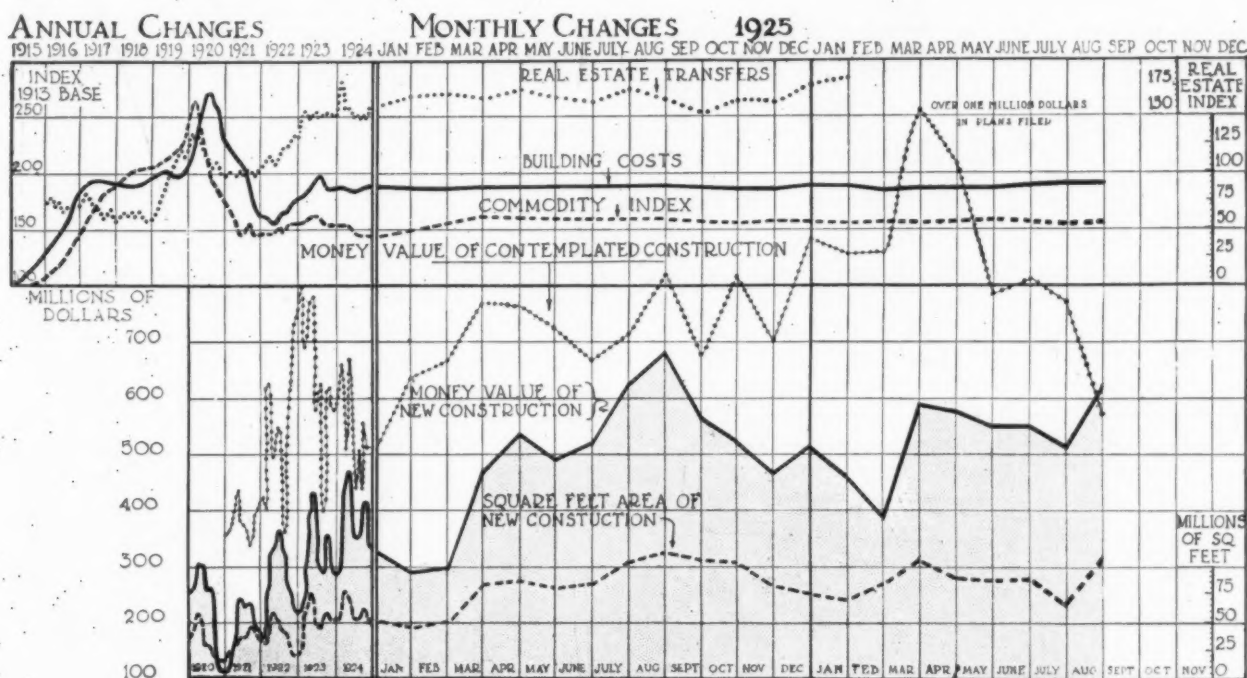
A MONTHLY REVIEW OF COSTS AND CONDITIONS

THE building figures for the month of August, as reported by the F. W. Dodge Corporation, are extremely interesting and offer much food for thought. The total value of construction contracts let during the month of August almost equaled the record-breaking figures for August, 1925.

The figures for contemplated new construction (plans filed) are lower than reported for many months, being actually less than the total amount of contracts awarded, a condition far from normal and consequently demanding some explanation. This matter was taken up with a number of architects and builders, and it is evident that many plans are being held on the boards for the purpose of considering new projects even to the point of filing plans. This is probably a temporary situation,—a pause for breath on the part of investors before rushing into another year's program. There is no indication that these plans will be permanently withheld from the market or that they will be kept in abeyance for even a short period. Huge quantities of new building space are still in demand, and general business is prosperous enough to pay the price, so that in all probability the

months of September and October will show large filings, bringing the average perhaps to record proportions. It is quite evident that we are approaching the time when building activity will begin gradually to reduce toward its stabilization at a new normal. Obviously the new normal will be at least 50 per cent or even higher than the old normal, known before 1915. From an economic viewpoint, a reduction of the building program to a fairly well stabilized volume will be a good condition, provided it is arrived at gradually and not by the reaction of a sudden suspension of interest on the part of investors in this field.

Funds for mortgage financing are still ample, and the confidence of the investing public is still sustained, even though disturbed temporarily by the recent failure of one of the large mortgage companies. That particular failure is not significant and indicates no weakness in this field of financing as long as good judgment is exercised and well controlled amortization features are maintained to offset any physical depreciation or falling off of replacement costs, which naturally affect appraised values and must be carefully considered by investors.



THESE various important factors of change in the building situation are recorded in the chart given here: (1) *Building Costs*. This includes the cost of labor and materials; the index point is a composite of all available reports in basic materials and labor costs under national averages. (2) *Commodity Index*. Index figure determined by the United States Department of Labor. (3) *Money Value of Contemplated Construction*. Value of building for which plans have been filed based on reports of the United States Chamber of Commerce, F. W. Dodge Corp., and *Engineering News-Record*. (4) *Money Value of New Construction*. Total valuation of all contracts actually let. The dollar scale is at the left of the chart in millions. (5) *Square Foot Area of New Construction*. The measured volume of new buildings. The square foot measure is at the right of the chart. The variation of distances between the value and volume lines represents a square foot cost which is determined, first by the trend of building costs, and second, by the quality of construction.

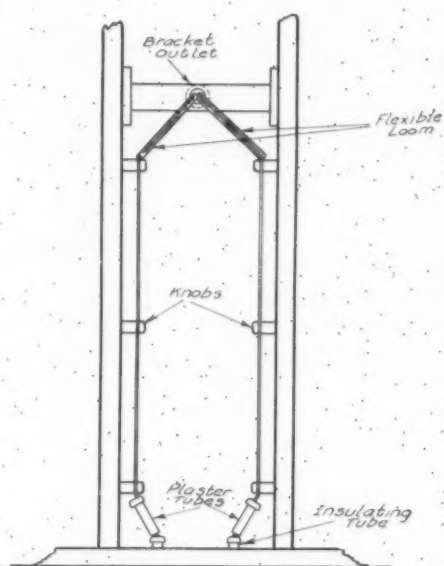


Fig. 1. Knob and Tube System of Wiring

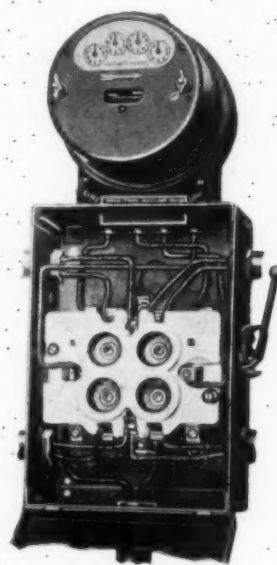


Fig. 4. Main Switch Box and Meter

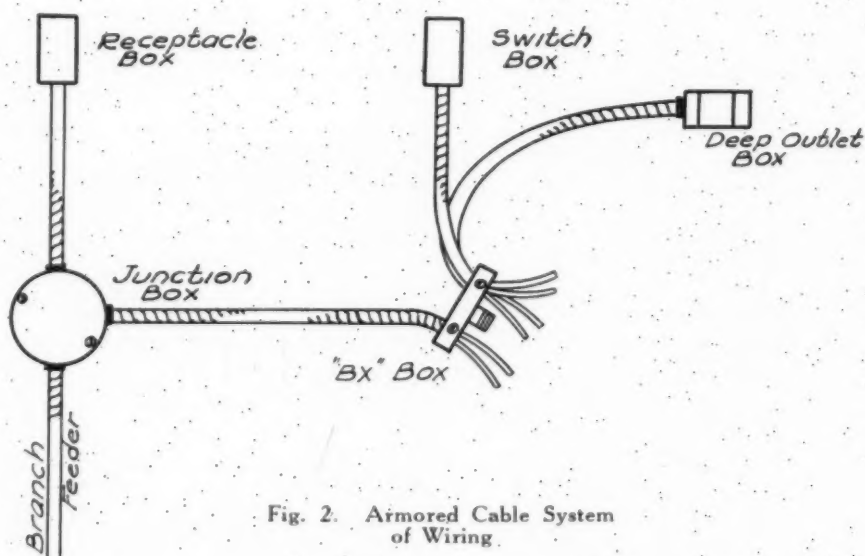


Fig. 2. Armored Cable System of Wiring

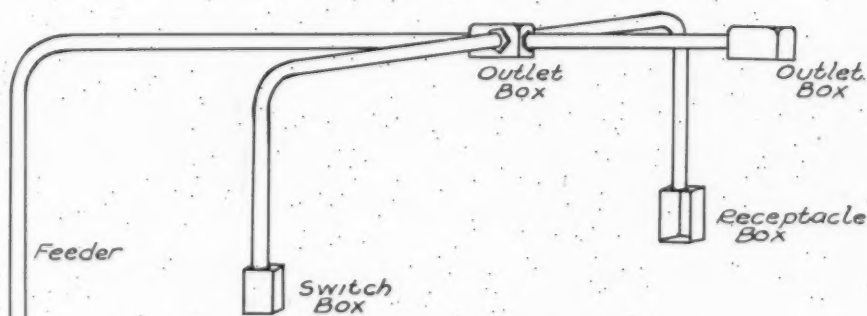


Fig. 3. Section of Conduit System of Wiring

ENGINEERING DEPARTMENT

Electrical Systems in the Residence; Part I.

By J. H. KURLANDER

IT can be safely said that the things we most depend upon are the things we least appreciate, the implication being that as long as anything functions satisfactorily, we accord it but little thought. This item of dependability is important, particularly in the case of electrical systems and devices in residences, since it can be presumed that the average man about the house lacks the necessary mechanical or technical bent wherewith to maintain the more complicated accessories which, more than ever, form a part of the equipment of modern residences. It is clearly the duty of the architect, when planning the electrical systems of such types of structures, to cover all possible contingencies which might arise in the ordinary course of service, thereby placing no temptations in the path of inexperienced persons to make additions to inadequate wiring systems.

Widening fields of application in the use of electricity make it advisable to provide plenty of reserve.

Methods of Wiring. Safety should be the keynote of any wiring system. The next moving consideration should be the adequacy of the number of utility and lighting outlets.

It is a tribute to the comparative safety of electricity, when properly used, and the diligence of the fire underwriters in supervising the safe installation of electrical systems in the country's municipalities and urban localities, that the percentage of fires having their origins in defects in electrical systems is remarkably low. As safe as electricity is when confined to its proper channels, it can be even more than destructive when carelessness in insulating the conductors, or false economy in providing accessories of insufficient capacity is tolerated in the construction of the system. It is, therefore, of primary importance that the strictest caution be exercised in permitting the use only of the highest quality equipment,—that which bears the stamp of "approval" of the fire underwriters. All "approved" devices are those which are acceptable to the electrical inspection department having jurisdiction.

There are in use today three distinct types of wiring systems classified according to the method by which the conductors are supported and carried from place to place through the structure. They are (1) Knob and Tube; (2) Armored Cable; (3) Conduit. They are given in the order of relative cost, safety, and durability, though the last named item is a factor on which little need be said.

An electric wiring system, to give a very simple

definition, consists of two wire conductors across which the various electrical devices in the form of lamps, heaters, fans, etc., are connected. One of these wires, ordinarily, is broken by suitable switches controlling the separate devices. Current is conveyed to each device by one wire and returned to the generator by the other, thus traveling in a loop between the residence and the electric service station. It goes without saying that these two wires must be insulated from each other to the highest degree so as to confine the flow of electricity to the prescribed path. To this end, each wire is first encased in a continuous rubber sheathing over which is laid a braided cotton covering impregnated with an insulating solution such as paraffin wax, or a tarry substance. Here ends the similarity in the three systems.

Knob and Tube Wiring. Briefly, the "Knob and Tube" system consists of supporting the wires by means of porcelain knobs on horizontal or vertical runs, and by means of porcelain tubes when passing the wires through floors, studs, etc. Split knobs are used for the purpose, so that the wires can be drawn taut when clamped in position. There is then no possibility of the wires' sagging and touching the woodwork. Every precaution is taken to thoroughly insulate the wires from one another, and wherever they must come within touching distance, such as when led into a switch box or outlet, flexible loom tubing, having special insulating properties, is used to encase each wire. The general scheme of installing a "Knob and Tube" system is illustrated in Fig. 1, which shows the wires rising through the floor to a wall bracket outlet supported between the studs. This method of wiring, compared with others, is relatively cheap as far as concerns material, but it requires more labor than the Armored Cable method, since both wires must be separately insulated and each must have holes drilled for it when passing through obstructions. Furthermore, it is subject to the depredations of mice and rats and accidental injury when effecting repairs to the house. While in past years it was the most widely used method, it is now rapidly giving way to the Armored Cable method, which costs practically the same in these days of high labor and which offers more protection and better means for concealment in places where space is limited, and hence is frequently used.

Armored Cable Wiring. Armored cable, commonly referred to as "Bx," offers admirable means for obtaining a high degree of safety at a very rea-

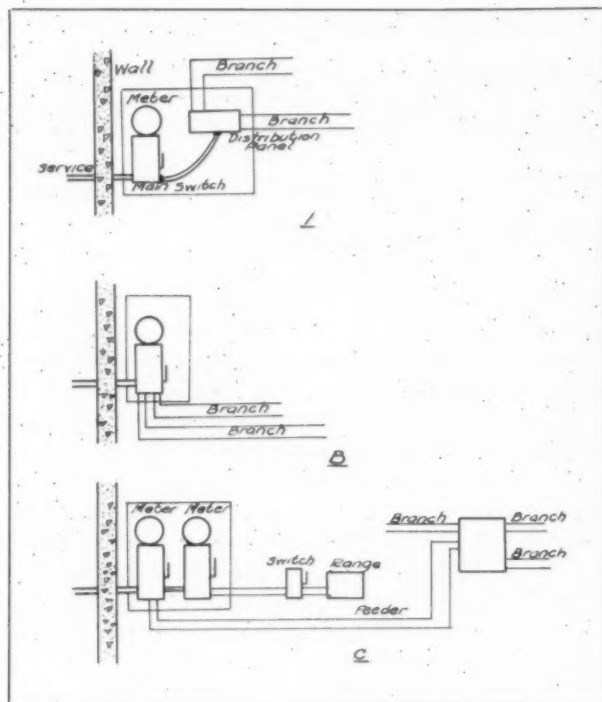


Fig. 5. Illustrating Three Methods of Current Distribution After Leaving Main Switch and Meter

sonable cost and is, therefore, being largely used. Indeed, a large number of municipalities prohibit the use of "Knob and Tube" wiring in the business districts, so that armored cable and conduit must necessarily be used. Armored cable consists of two wires, each covered with rubber and a braided sleeve. Both are contained in a common sleeve of braided cotton soaked in paraffin wax, and the whole is then protected by a spirally wound sheath of heavy soft steel having its edges interlocked to form a continuous tube, thus giving it the desired flexibility without impairing the ruggedness which its use demands.

No special precautions are necessary to insulate it when concealing it in partitions and floors, holes being drilled and the cable then merely pulled through to the desired outlet locations. On vertical runs along brick walls it can, if necessary, be embedded directly in the wall itself. Special armored cable, oval in shape and quite thin, has been developed to meet just such needs. As used in the wiring system, each run of cable has its origin and it also terminates in a metal box. This is illustrated by Fig. 2, which shows a section of such a system and the methods of effecting junctions in the line. It will be seen that the entire wiring system is encased in metal, thus offering a high degree of protection from mechanical injury and confining any arc or fire which may result from failure of the equipment.

In order to prevent, as far as possible, such accidents, precautions are taken to insure against the insulation of the wires being chafed or otherwise damaged. Where the cable runs into a junction box, a special clamping collar, threaded on one end, securely grips the cable, after which the threaded end

is inserted through a hole in the junction box and held rigidly in position by a locknut. When entering switch and receptacle boxes, a smooth brass ferrule is threaded onto the end of the cable sheathing, after which this protected end is inserted through a hole in the box and clamped into position by means of a clamp and a screw supplied as a part of the box. The jagged ends of the cable sheathing cannot vibrate and injure the insulation.

Conduit Wiring. Conduit wiring is not generally used for residences, except where wiring costs are not too closely scrutinized, since it entails considerably more expense for materials and labor than either of the other methods. When once installed, however, it can be considered as being permanent, and it affords the maximum protection for the wiring as it cannot be injured easily or tampered with. Furthermore, the current-carrying capacity of the system can be increased in a relatively easy manner, since the old wires are readily withdrawn and larger wires substituted. This is not true of the other systems.

Conduit wiring is similar to the Armored Cable method, since it, too, encases all the current-carrying wires and the various switches, receptacles, etc., in an unbroken channel of protective metal. The principal difference lies in the fact that whereas conduit is rigid and must be installed after the manner of steam pipes, water pipes and gas pipes, armored cable, by contrast, is quite flexible and readily lends itself to rapid installation, since it can be quickly threaded through holes in beams and studs, or nailed into place by means of pipe straps.

A small section of a conduit system is illustrated in Fig. 3 and shows the manner in which the various outlets are fed with current. As with the Armored Cable method, so with conduit; no splices in the wires are permitted in a concealed system except in the outlet boxes. This, of course, in the interests of safety.

Metal Moulding. No mention has been made of metal moulding, as this is ordinarily used for extensions to existing installations where it is undesirable, or impracticable, to conceal the wiring beneath floors and in partitions. Indeed, it does not constitute a form of concealed wiring and it cannot be used in such a manner. Its application in residences, therefore, is strictly limited to those places where appearance is not a primary consideration.

Service Connections and Distribution Methods. The residence types of wiring systems can be divided into three principal parts: (1) the point of service entrance, where the meter board, supporting the meter, disconnecting switch, and distribution panel box, are located; (2) the local points where the current is used to operate the various lamps, heating devices, etc., supplied by branch circuits; and (3) the feeders connecting these local areas with the source of current supply at the meter board.

Briefly, these three parts function in this manner: The service wires, encased in conduit, are led into the building, usually through the basement wall, and immediately enter an externally operated, enclosed

safety switch of approved form (Fig. 4). The main fuses (30-ampere usually) are contained in this switch box, one or two being used, depending upon whether or not the wiring is "polarized." After passing through the switch and fuses, the service wires go to the meter, which is placed directly above the switch box so that its lower end projects slightly into the box. In finished form, the meter and switch box constitute a complete unit, exposing no connecting wires. The switch box is then sealed by the electric service company to prevent tampering.

The current is now ready for distribution through the house, and one of several methods, illustrated in Fig. 5, may be employed. Scheme A shows a commonly used method. The system is divided into as many branch circuits as may be required (each limited to 15-ampere load) which terminate, at the meter board in a panel box containing either one or two plug type fuses of 15-ampere capacity for each circuit. This panel box is then fed directly from the meter. The principal objection to this method is that the burning out of a branch line fuse necessitates a trip to the basement. In order to avoid this inconvenience the panel box with the fuses is frequently placed in an upper hallway or room to make it readily accessible (Fig. 5-B). Since it is then in a more conspicuous location, it is becoming the practice to use a "dead front" type of panel box similar to that shown in Fig. 6. Aside from presenting a better appearance, all the live parts are protected from accidental contact with one's person. There has recently appeared on the market, for use with "polarized" systems, a new type of main safety switch in which the functions of safety switch and panel box have been combined. The branch plug fuses, either two or four in number, one for each circuit, are contained in this switch box along with the main fuse. The branch lines then go directly from the switch box to their prescribed places as indicated in Fig. 5-C.

It is the writer's understanding that certain electric service companies make a practice of separating the residence load into these four different divisions:

(1) Lighting; (2) Primary heating devices, such as ranges; (3) Refrigerators; (4) Power (motors totaling more than 0.5 horse power). More favorable rates for power are offered for the larger current-consuming devices and according to their constancy of operation. To take advantage of these lower rates it is necessary to have installed a separate meter for each class of service. The separation of the main circuits into these various primary feeder circuits occurs at the meter, and Fig. 5-B illustrates how this is accomplished. This shows an electric range, supplied from its own individual meter, which in turn is fed from the main circuit through the principal disconnecting safety switch.

Recommendations for Residence Circuits. It goes without saying that the number of lighting and utility outlets in any residence should be adequate in the broadest sense of the word. Current-carrying



Fig. 6. "Dead Front" Type of Panel Box, Used With System of Current Distribution Illustrated by Fig. 5-B

wires, concealed in partitions and beneath floors, cannot possibly be of service unless means are available for tapping the energy they carry. In recommending outlet locations in residence circuits, the writer can think of no better suggestion than those given in the Red Seal Wiring Plan prepared and approved by the Electrical Extension Bureau of Detroit, and the Society for Electrical Development.

These suggestions, which are drawn up in the form of specifications, provide *minimum* requirements for adequate wiring. They are considered as a reasonable standard and are based on a study of the facilities which should be available in the home today. They are thus given in detail:

Living Room. One ceiling light outlet, controlled by wall switch. Two three-way switches for room with two main entrances located more than 10 feet apart. One bracket light outlet for every 15 feet of wall space, including openings, controlled by wall switch. Where there is a mantel shelf, two mantel outlets shall be provided on the shelf unless there are two bracket light outlets above the mantel. One convenience outlet for every 12 running feet of wall.

Dining Room. One ceiling light outlet controlled by wall switch. Two three-way switches for a room with two doorways more than 10 feet apart. All dining rooms having 44 or more running feet of wall space, including openings, shall have one bracket light outlet for every 20 running feet controlled by wall switch. One convenience outlet for every 15 running feet of wall space, including openings. One floor plug under dining table.

Kitchen. One ceiling light outlet controlled by wall switch. One light outlet over sink. Two single

convenience outlets, certain to be needed for utilities.

Bedrooms. One ceiling light outlet controlled by wall switch. All bedrooms having 44 or more running feet of wall space, including openings, shall have one bracket outlet for every 20 running feet. One convenience outlet for every 15 running feet of wall space, including openings.

Coat and Clothes Closets. One light outlet each for closets of over 10 square feet area.

Sun Rooms, Libraries, Pantries, Alcoves, etc. One ceiling light outlet controlled by wall switch. One convenience outlet for every 15 running feet of wall space, including openings.

Main Halls. One ceiling light outlet controlled by wall switch. One convenience outlet.

Stair Landings. More than 30 square feet floor area shall have one light or convenience outlet.

Bathrooms. One bracket light on each side of mirror, controlled by wall switch. Bathrooms in excess of 72 square feet floor area shall have ceiling light outlet controlled by wall switch in addition to wall brackets. One heater outlet and one convenience outlet.

Breakfast Room. One ceiling light outlet controlled by wall switch. One duplex convenience outlet on separate circuit.

Laundry. One ceiling light outlet; one convenience outlet on ceiling near laundry tubs; one convenience outlet on separate circuit.

Porches and Entryways. One light outlet controlled by switch in building. A covered porch 60 square feet area or over shall have one convenience outlet.

Stairways. All outlets lighting stairways (except to basements and unfinished attics) to be controlled by three-way and four-way switches as required.

Basement. Lighting to be controlled by switch on first floor operating one or more light outlets for general illumination in basement; one light outlet in front of furnace; one light outlet in fruit room; one

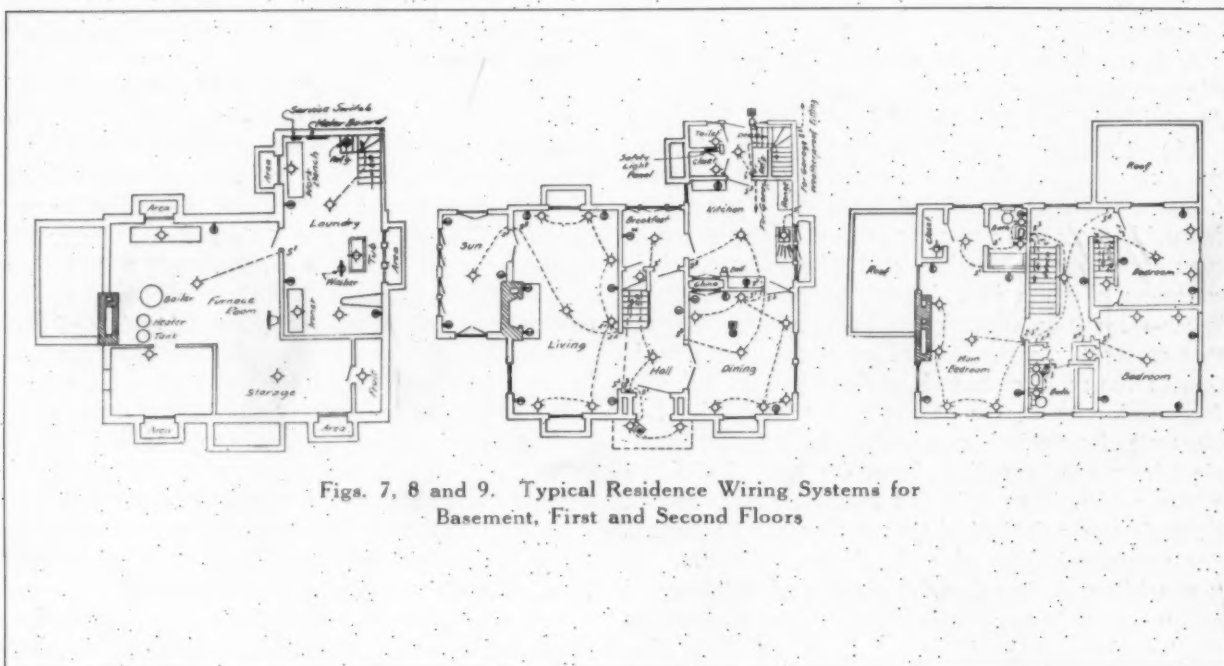
light outlet in coal room ceiling near door. (See also requirements under "Laundry" on this page.)

Garage. One ceiling light outlet controlled by switch; one convenience outlet.

Locations of Outlets. The height of the bracket lights to be in general 5 feet, 8 inches from finished floor. The height of switches shall be in general 4 feet from finished floor. Convenience outlets shall be in baseboard or not more than 14 inches, except in kitchen, 42 inches; bath and breakfast room, 36 inches above finished floor. Laundry ironing outlet to be 42 inches above finished floor.

General. Outlets must not be placed behind radiators or swing of doors. Push buttons at front, rear and grade doors to operate bells or buzzers from current to be provided by low-voltage transformer located on basement lighting circuit. Illuminated house number to be placed on front of house. All lighting outlets to be equipped with fixtures. At least two spare circuits are to be provided in panel for future use. All switches are to be flush type. When more than one switch come in the same location, they are to be gauged under one plate. Convenience outlets and plugs are to be flush standardized, interchangeable type.

Recommendations. It is recommended that 3 per cent of the cost of the building be allowed for lighting fixtures; that all convenience outlets, except in kitchen and laundry, be duplex (double); that all branch circuits be run to a dead front safety type residence panel—Edison plug type—containing all the necessary plug fuses; that hall switches have luminous devices, and that all bell or buzzer buttons be of cast brass; that an outlet be installed under the dining table to operate signal in kitchen; that rooms having more than one entrance shall have lights controlled by three-way switch; that garages have exterior lights controlled by three-way switch.



Figs. 7, 8 and 9. Typical Residence Wiring Systems for Basement, First and Second Floors

An Old Greek Revival Court House

By THOMAS E. O'DONNELL

Assistant Professor of Architecture, University of Illinois

THE Greek Revival movement, which began in 1799 with the building of the Bank of Pennsylvania in Philadelphia by Latrobe, was a style admirably suited to public buildings. Not only in the east was it made the official style for public edifices, but especially in the middle west, which was being first developed between 1800 and 1850, the Greek Revival manner was most eagerly accepted as the correct style for all kinds of building, both public and private. The development of architecture in Ohio was very rapid, due to the ever-increasing population and wealth in the state during the first half of the nineteenth century. Many new towns and counties were founded. The "county," of Virginia, rather than the New England "town" system had been adopted in Ohio. This system of local government called at once for certain county administrative buildings, the most important of which

was the "court house," generally the first to be built.

The earliest court houses built were of a simple, post-colonial type. They were usually square in plan, two stories in height, with hipped roofs, at the centers of which were small cupolas or bell towers. The earliest of these were of frame and those built later of brick or stone construction, where those materials were available. By 1830 or 1840, most of the early post-colonial types were outgrown, and new structures were proposed. The vogue of the Greek Revival was by that time fully established throughout the new state as the style most suited to the public buildings, and consequently there were a great number of Greek Revival court houses erected during this period, many of which are still standing.

A fine and typical example is the Sandusky County Court House, at Fremont (formerly, Lower Sandusky), Ohio. By 1840 the old court house had



Sandusky County Court House, Fremont, O.
Built 1840-1844

been completely outgrown, and on March 4 of that year an order was given to the County Commissioners providing for the erection of a new structure. The site chosen was a city square near the center of the town, on the high west bank of the Sandusky River, and not far from the site of the historic Fort Sandusky. The ground was purchased on April 3, following, by the three commissioners who were then in charge, Paul Tew, Jonas Smith and John Bell.

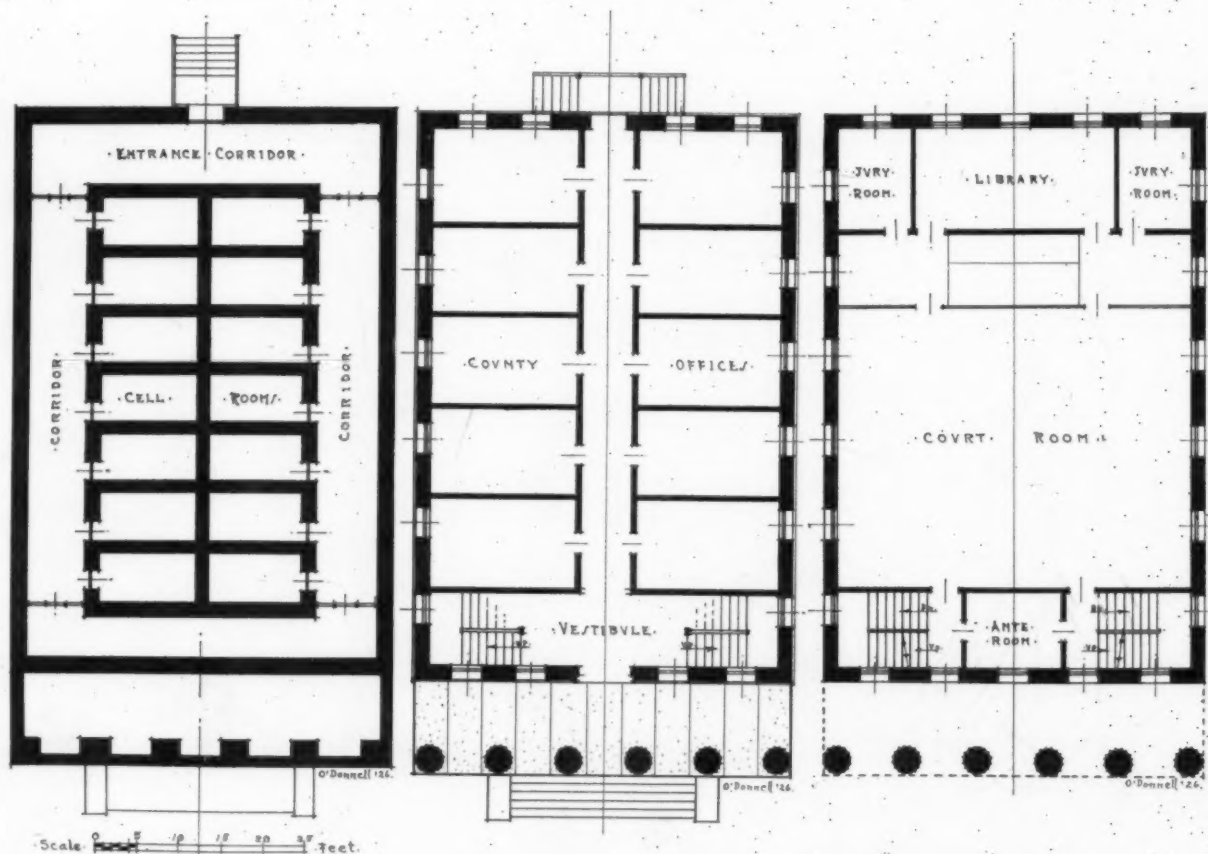
Cyrus Williams was appointed architect and superintendent of construction, and the contract for the entire work was let on June 2, 1840, to Isaac Knapp, his bid being \$14,550. The records show that at a later date he was allowed \$2,000 additional compensation,—perhaps for the proverbial "extras." The most startling thing concerning the entire transaction is the "relative importance" accorded the architect, even in this American-Greek-Classic period, which is evidenced by the fact that Mr. Williams received the munificent "salary" of \$300, which is recorded in the Commissioners' Journal as having been paid on December 8, 1842, two and one-

half years after the contract was let! The building was completed and accepted by the Commissioners in July, 1844, and was, therefore, four years under construction, thus allowing time for excellent building.

This structure may be taken as a typical example of a Greek Revival court house in Ohio, of the 'forties. It conforms to the accepted formula, which is an adaptation of the temple type of structure,—rectangular in plan, two stories and basement in height, a portico, either pedimented or plain, at the front with colossal Greek columns and a cupola placed over the front or center of the main mass of the building. The three floor plans of the Fremont court house are shown in the accompanying drawings. The basement was somewhat unusual in this case, for it served as the county jail; the first floor, was used for the various county offices, and the second floor, the most important of all, contained the court room, the law library and various anterooms.

The jail must have been a veritable dungeon, cold, damp, unventilated and unsanitary, and when viewed in the light of modern prison and jail architecture,

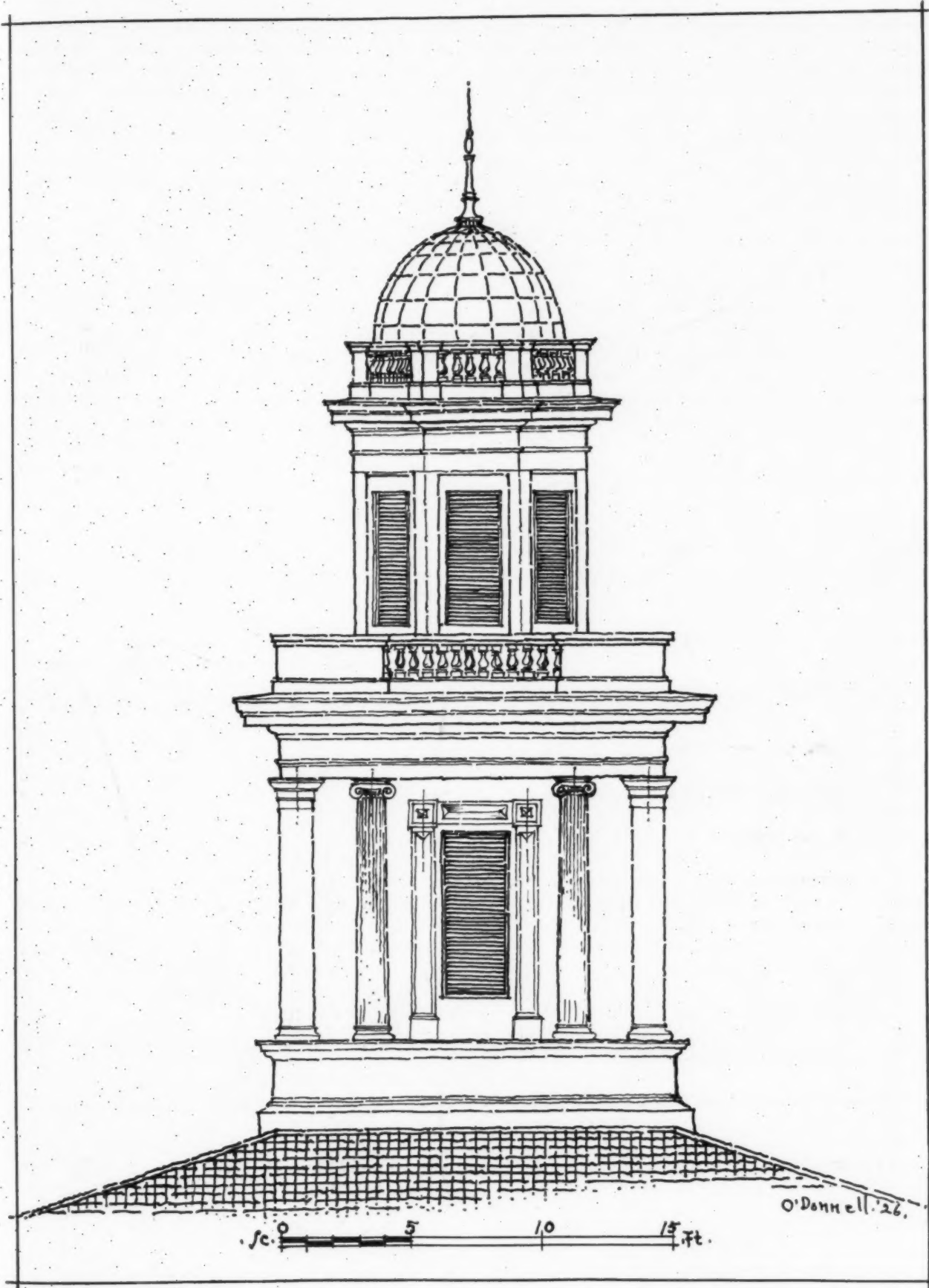
PLANS BEFORE ALTERATIONS, SANDUSKY COUNTY COURTHOUSE, FREMONT, O.



Basement Floor, Showing Cells as Originally Designed for Jail Use

First Floor, as Originally Designed. Built 1840-1844

Second Floor, Showing the Court Room and Ante-Rooms



MEASURED SKETCH OF CUPOLA, SANDUSKY COUNTY COURT HOUSE, FREMONT, O.

it does not reflect great credit upon the humanitarian ideas of the period. The cells were arranged down the center of the basement area and separated from the outside walls by wide corridors which gave access to them. The floor was composed of very large and thick slabs of sandstone. On this the walls of the cells were constructed of cut limestone in large units. The cells were then covered with heavy sandstone flagging which also formed the floor of the story above. The cells were closed by doors of strong iron bars. Each was just large enough to accommodate a cot for one occupant. The only access to this underground dungeon was by a single door at the rear. It was what a jail was expected to be.

The first floor consisted of the portico, paved with sandstone flagging, an entrance vestibule and stair hall, and a long central corridor extending from front to rear with rooms for county officers on either side. The floor was of sandstone flagging, laid directly on the cell walls below. The stairways gave access to the second floor. The exact arrangement of the rooms on this floor is not known, since through subsequent remodelings the original scheme has been lost. But it is known that there was a large court room, a library and necessary ante-rooms, and these have been restored in the accompanying plans to something of their original arrangement. The floor construction of this story was of sandstone flagging laid in mortar on heavy timbers placed close together, solid, and built to last indefinitely.

The original building,—the front portion of the present structure, and that which is here shown in the measured plans,—was 45 feet in width and 78 feet in depth, including the portico. The basement foundation walls up to the first floor line were of dressed limestone, the main walls above of brick, and the cornice and roof of wood construction. The colonnaded portico on the east is 11 feet in depth, and in this case is not crowned by a pediment but by a horizontal cornice, a continuation of the main cornice of the building. The roof is of the low hipped type and was originally covered with pine shingles, which at a later time were replaced with tin. The six Greek Doric columns of the portico are of wood, built up, 38 inches in diameter at the base, about 29 feet high, and fluted. The proportions are those of the columns of the Parthenon, which building the Revivalist had been assured by Stuart & Revett, was the perfect example of Doric architecture. Their advice was generally followed.

It had become a tradition during the post-colonial period that a court house should have a cupola with a bell or clock, just as it was thought necessary that every church must have a spire and every state house a dome. This placed an obstacle in the path of the Greek Revival designer, one which he was never able to overcome satisfactorily, for the spirit of his time was in favor of "pure Greek" forms, though in Greek architecture there were no cupolas, spires or domes. But precedent for the cupola was not wholly wanting for the Revivalist, especially in

America, for in the first Greek Revival example, the Bank of Pennsylvania, (1799), Latrobe had introduced a small cupola over the center of the building, and in 1832 Strickland, his pupil, had completed the Merchants' Exchange, Philadelphia, in which he used an almost exact replica of the Choragic Monument of Lysicrates as a cupola or crowning feature.

No fixed formula either as to the form or the position of the cupola on the building was followed in the Ohio court houses in this style. In the Fremont example the cupola was of frame construction, and consisted of a low, square base surmounted by a smaller octagonal structure crowned by a small, conical roof. It was placed a little in front of the center of the main mass of the building, directly over the court room, and was supported entirely by the heavy, wooden roof trusses. Although the cupola may be looked upon as a suggestion of those of colonial times, at the hands of the Greek Revivalist it took on qualities never found in colonial work, its character being so changed as to harmonize with the severe classic lines of the Greek type of structure. The details of the Fremont court house cupola are shown in the accompanying measured sketch. As usual, in this building the Greek Doric was used on the main structure below and the Ionic, being lighter and more graceful, was used to embellish the cupola.

In 1870 it was found that the court room was entirely too small, and on September 10 of that year the commissioners entered into a contract to extend the building 40 feet at the rear. At the same time extensive alterations and additions were made on the interior, especially in the court room, which was entirely rebuilt. This remodeling, unfortunately, changed the character of the interior, leaving very little, if any, of the original interior architectural decorative features. It is probable, however, that a building of such a definite Greek Revival character on the exterior had upon its interior appropriate Greek Revival decorative details, especially in the court room. It is known that in the Greek Revival churches of this period it was the rule to treat the pulpit and the wall back of the pulpit with Greek Classic motifs. The pilastered wall treatment was especially popular, so it is not unlikely that the walls of the court room in this building were given the characteristic treatment.

The severely plain and dignified effect of the Greek elements would have been most appropriate for a court room, and such motifs were indeed often used.

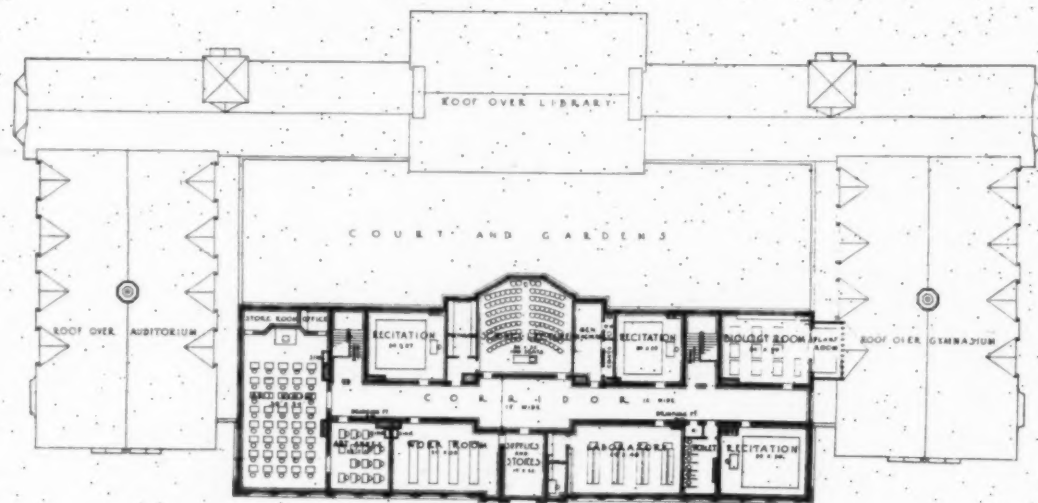
Although the Fremont court house exhibits defects in plan and general design, and in some ways is inappropriate and exotic, it must be remembered that it was built in pioneering times, in a state where 40 years earlier there were no structures except primitive Indian wigwams. This building is representative of that class of early Ohio architecture which sowed the germ of classicism in the middle west, giving a favorable prestige to the pioneer states and counties, and making a firm basis upon which to build confidently our future architecture.



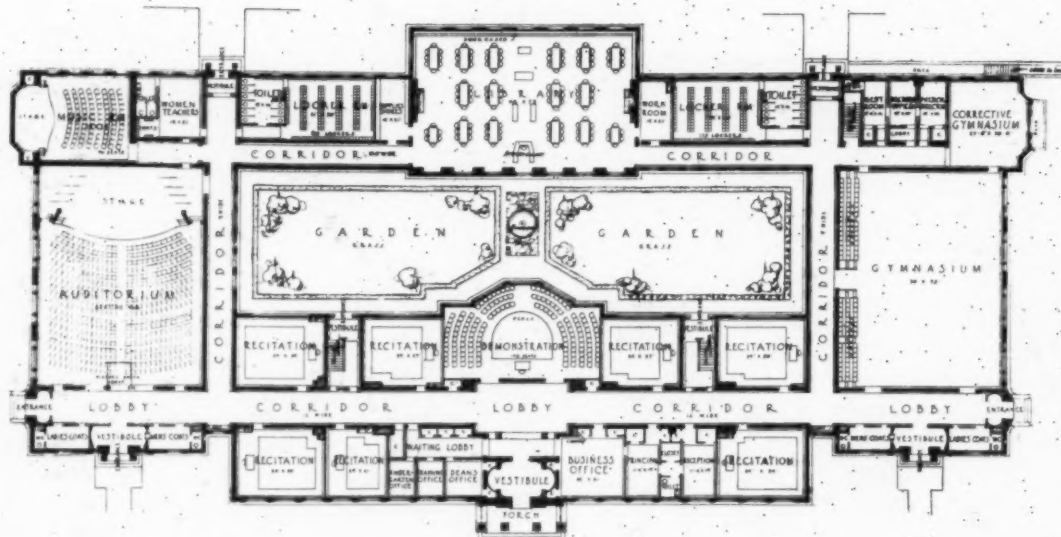
Photos, Dix Duryea

Plans on Back

MAIN BUILDING, STATE NORMAL SCHOOL, NEW BRITAIN, CONN.
GUILBERT & BETELLE, ARCHITECTS



SECOND FLOOR



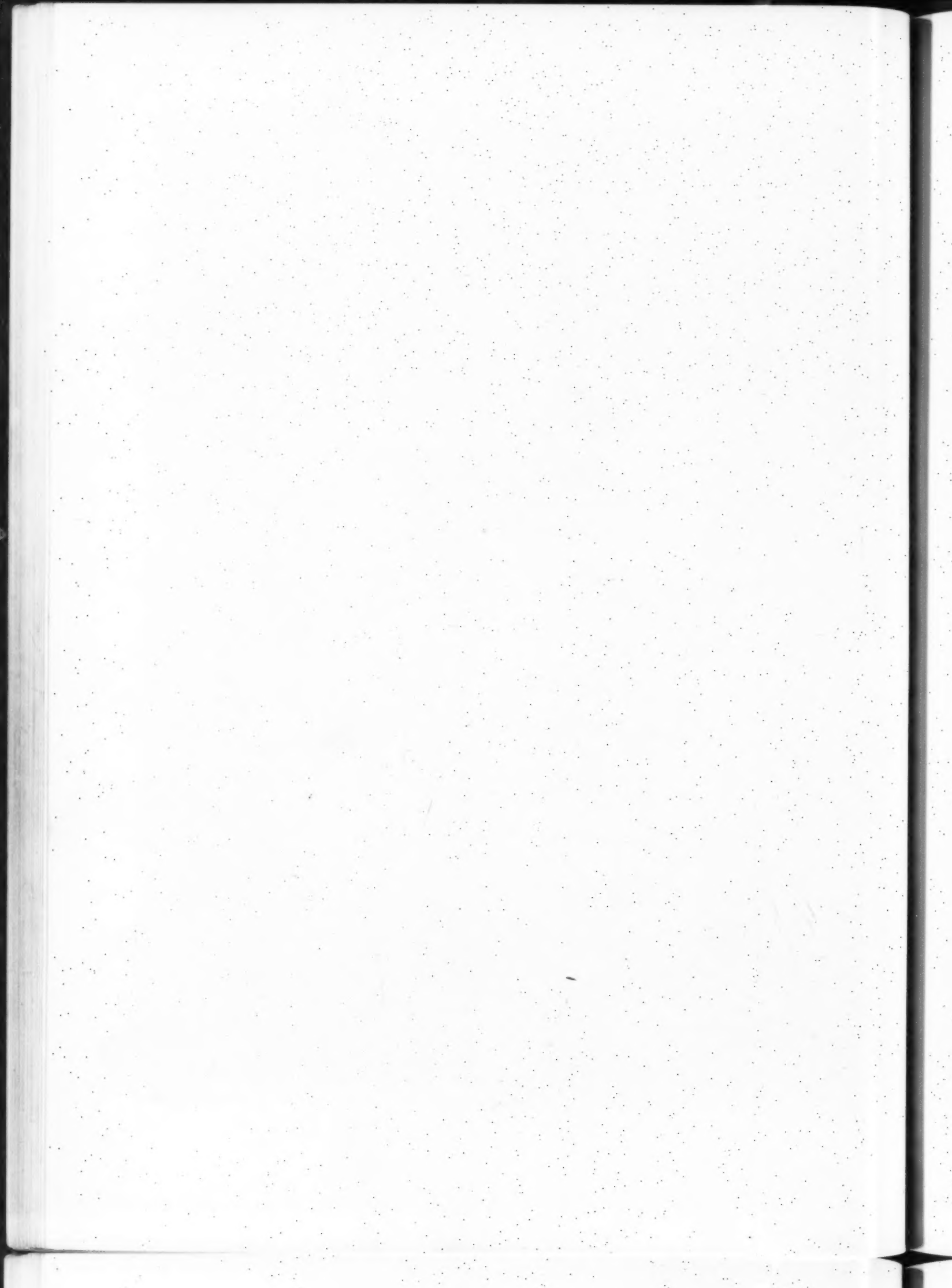
FIRST FLOOR

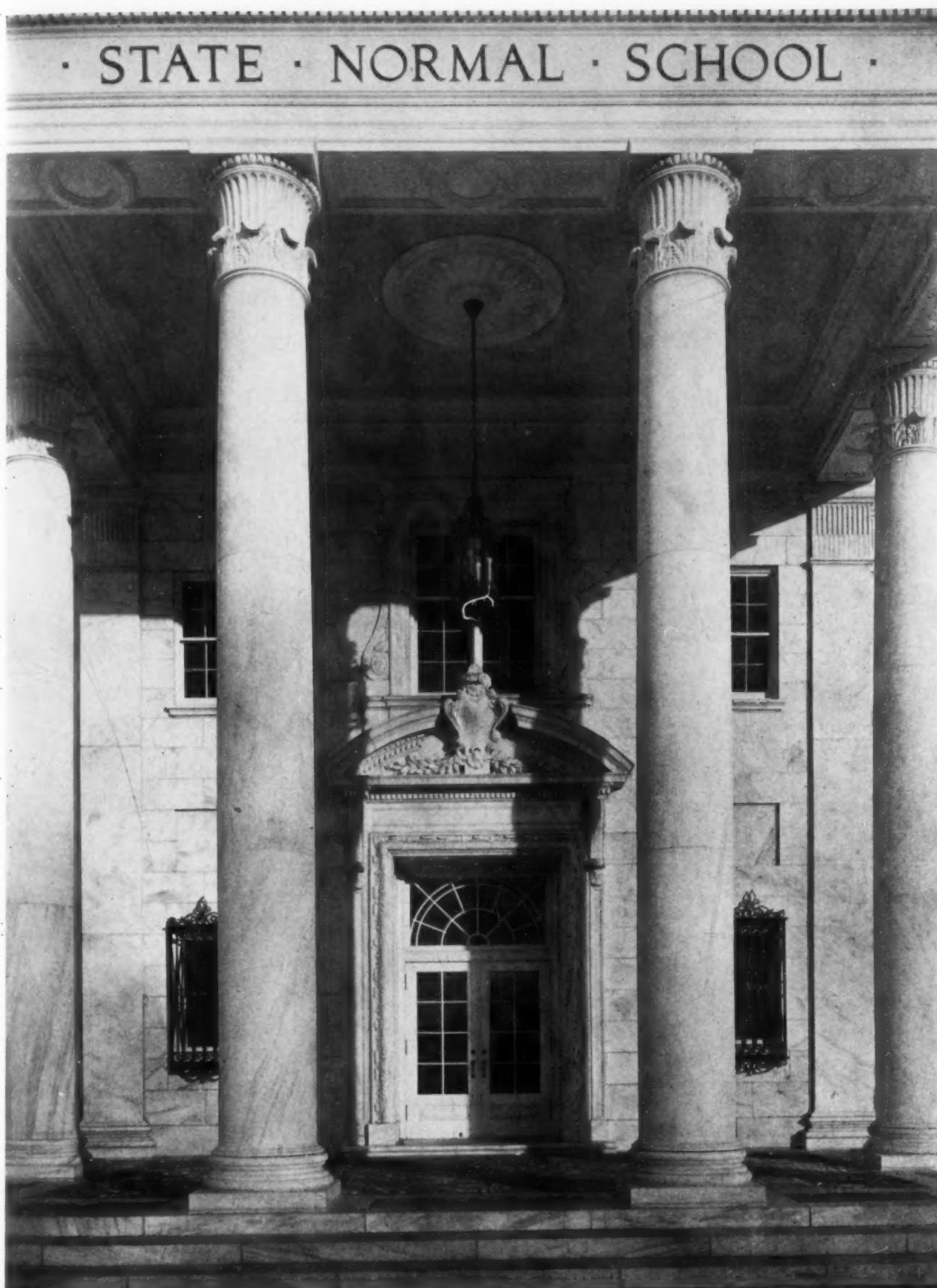
PLANS, MAIN BUILDING, STATE NORMAL SCHOOL, NEW BRITAIN, CONN.

GUILBERT & BETELLE, ARCHITECTS



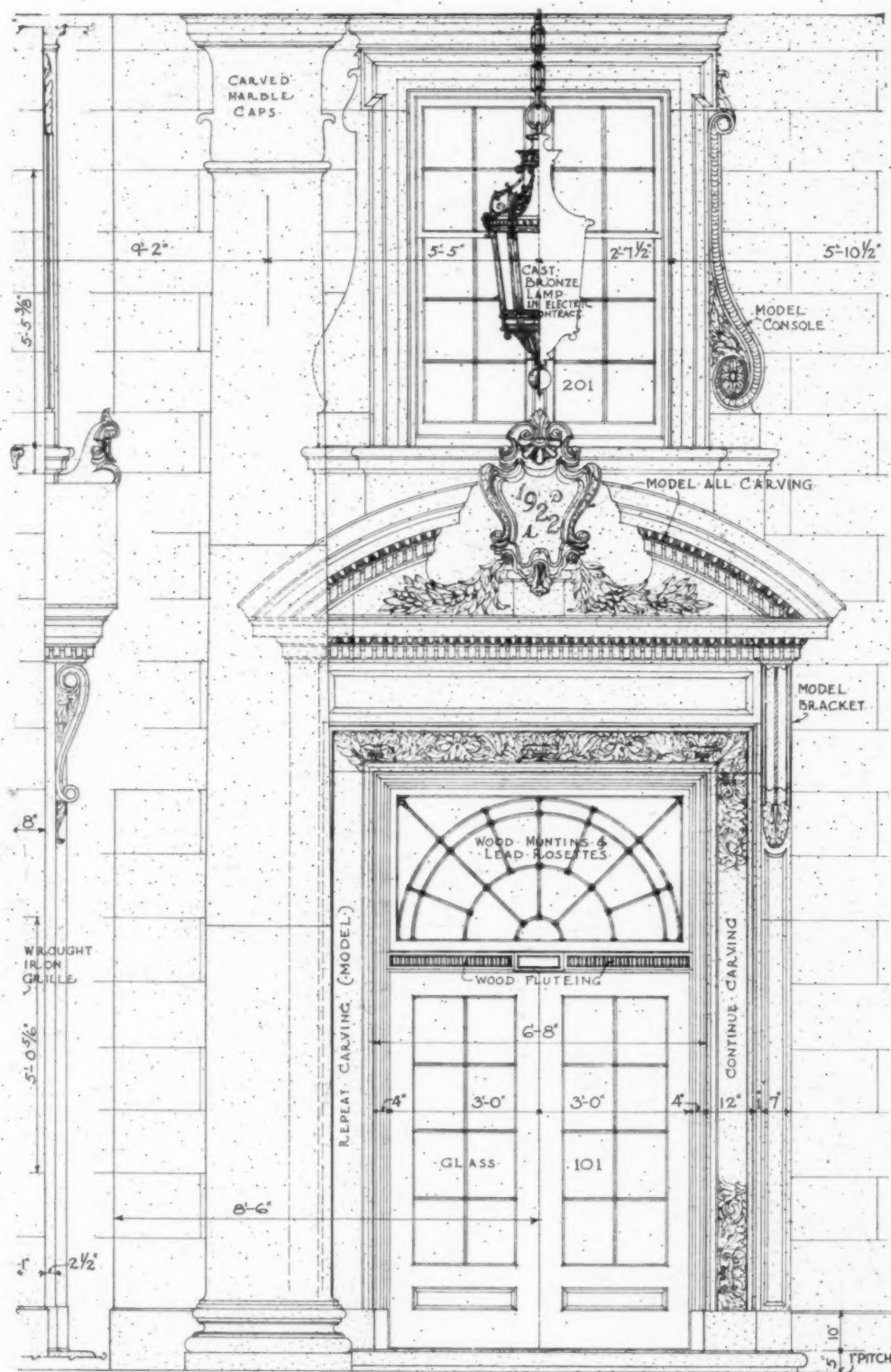
MAIN ENTRANCE, STATE NORMAL SCHOOL, NEW BRITAIN, CONN.
GUILBERT & BETELLE, ARCHITECTS





MAIN DOORWAY, STATE NORMAL SCHOOL, NEW BRITAIN, CONN.
GUILBERT & BETELLE, ARCHITECTS

Measured Drawing on Back



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SECTION

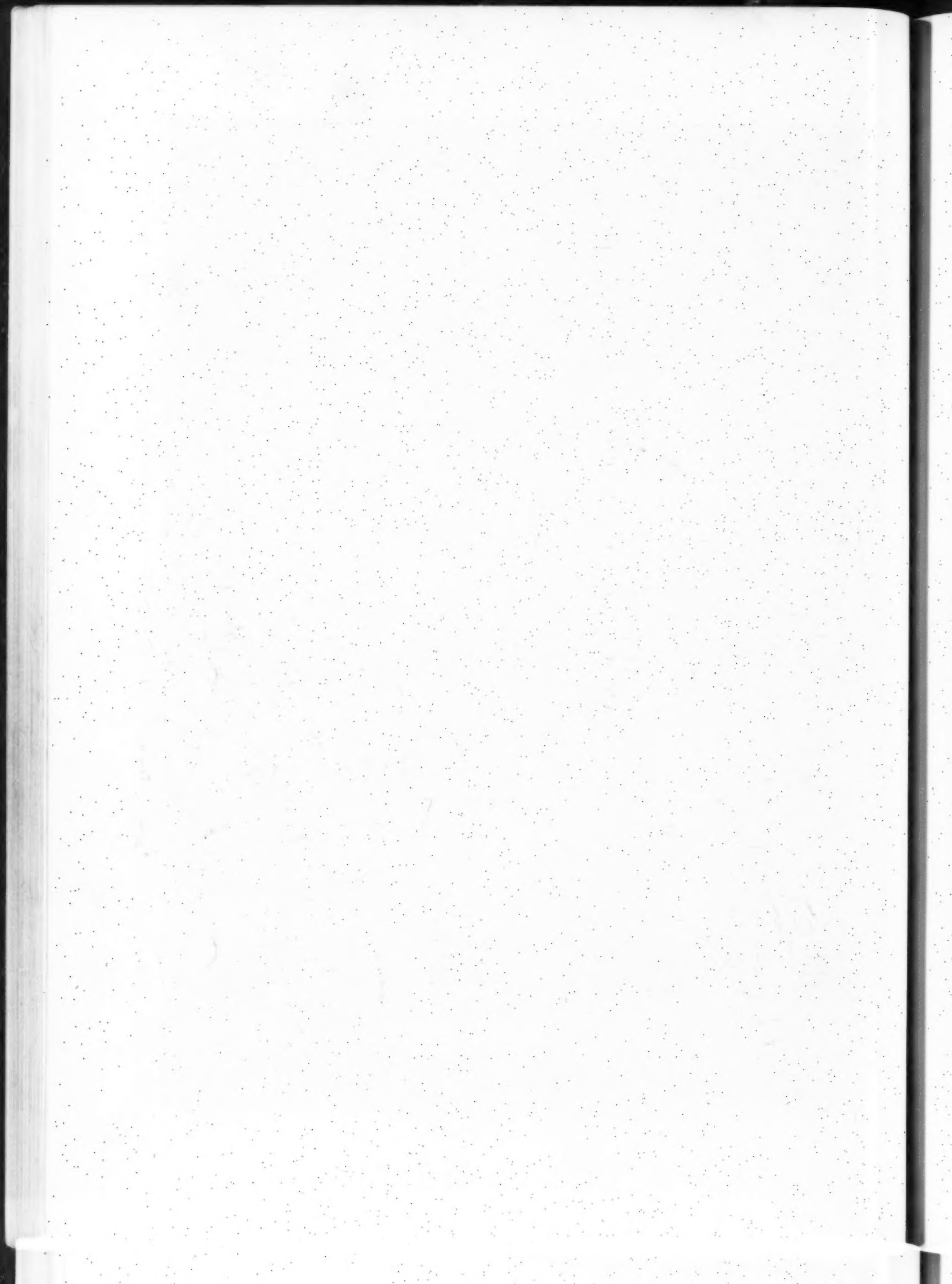
DETAILS OF MAIN DOORWAY
STATE NORMAL SCHOOL, NEW BRITAIN, CONN.
GUILBERT & BETELLE, ARCHITECTS

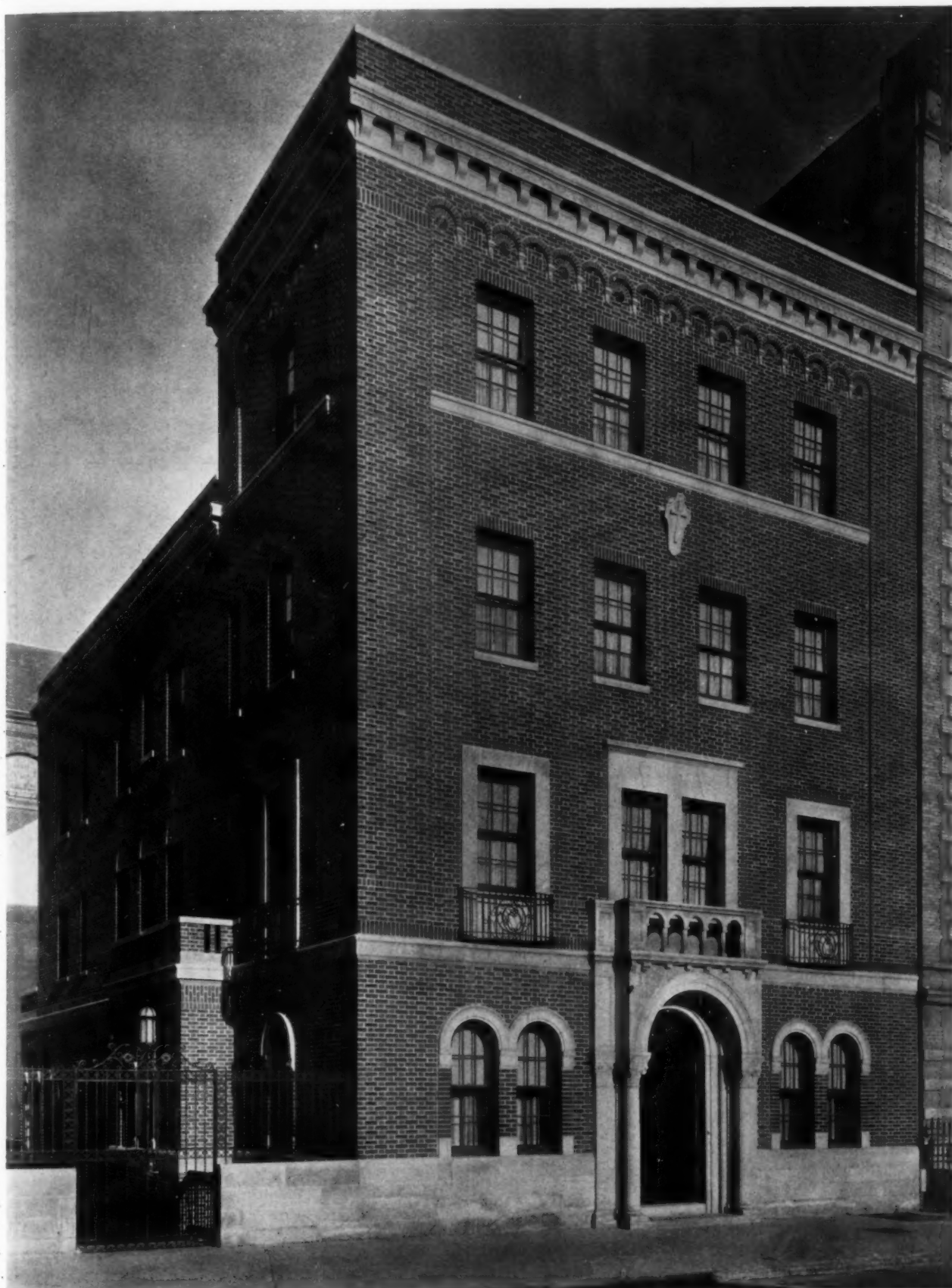
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The ARCHITECTURAL FORUM DETAILS



AUDITORIUM, STATE NORMAL SCHOOL, NEW BRITAIN, CONN.
GUILBERT & BETELLE, ARCHITECTS





Drawing of Doorway on Back of Plate 62

Plans on Back

CONVENT OF ST. ROSE OF LIMA, NEW YORK
ROBERT J. REILEY, ARCHITECT

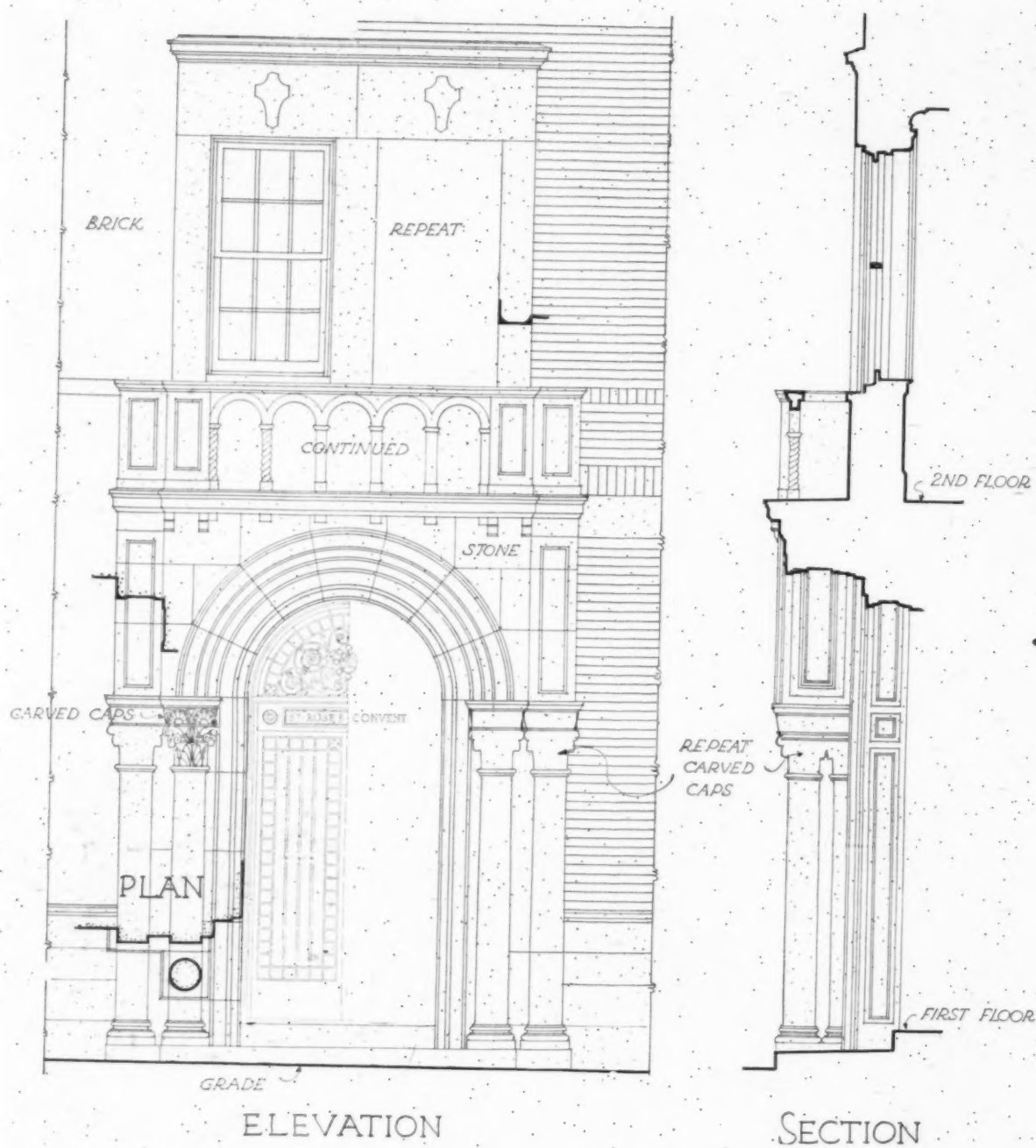


PLANS, CONVENT OF ST. ROSE OF LIMA, NEW YORK

ROBERT J. REILEY, ARCHITECT.



CHAPEL, CONVENT OF ST. ROSE OF LIMA, NEW YORK
ROBERT J. REILEY, ARCHITECT

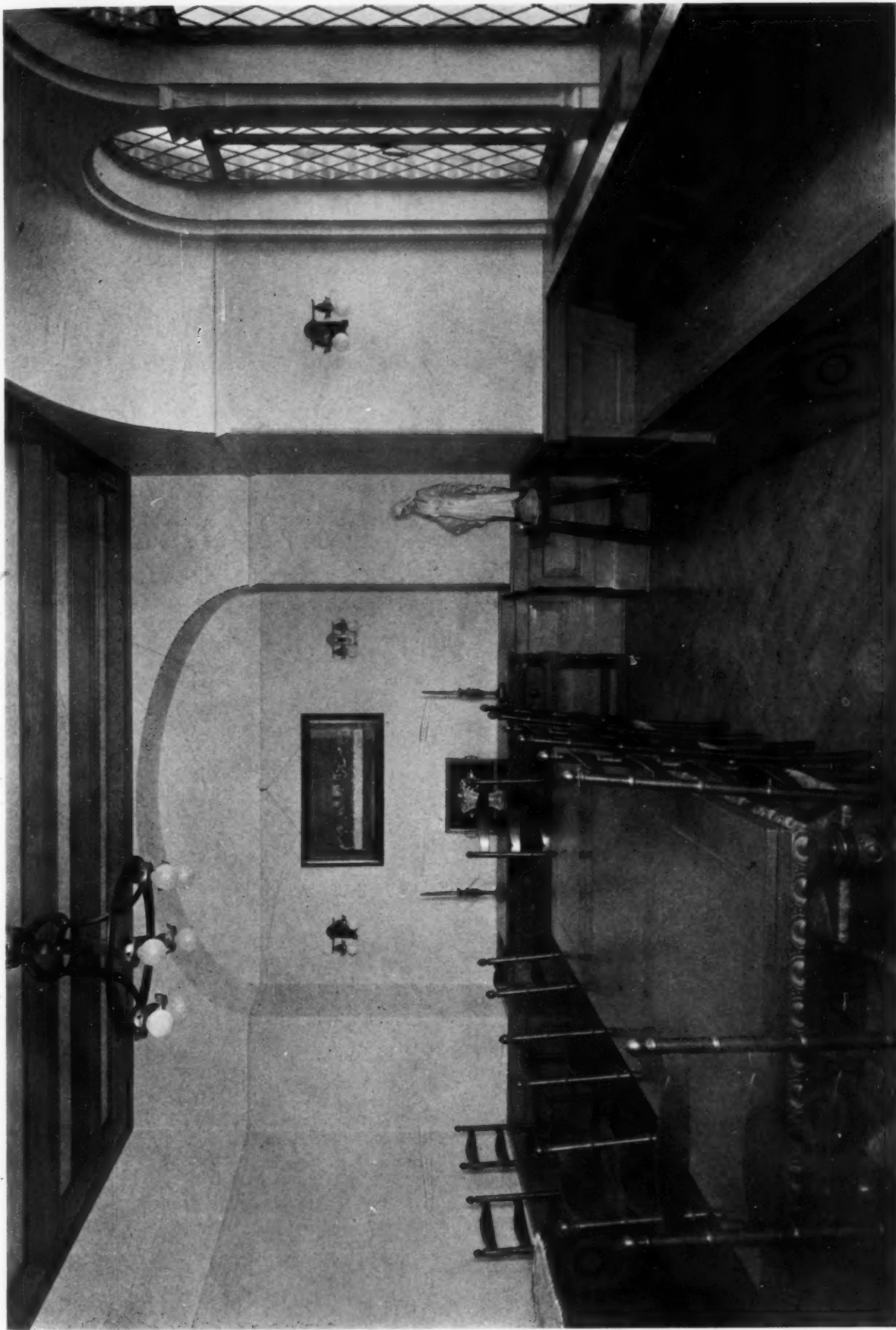


MAIN ENTRANCE DETAIL
ST. ROSE OF LIMA CONVENT
ROBERT J REILEY ARCHITECT NEW YORK CITY

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The ARCHITECTURAL FORUM DETAILS



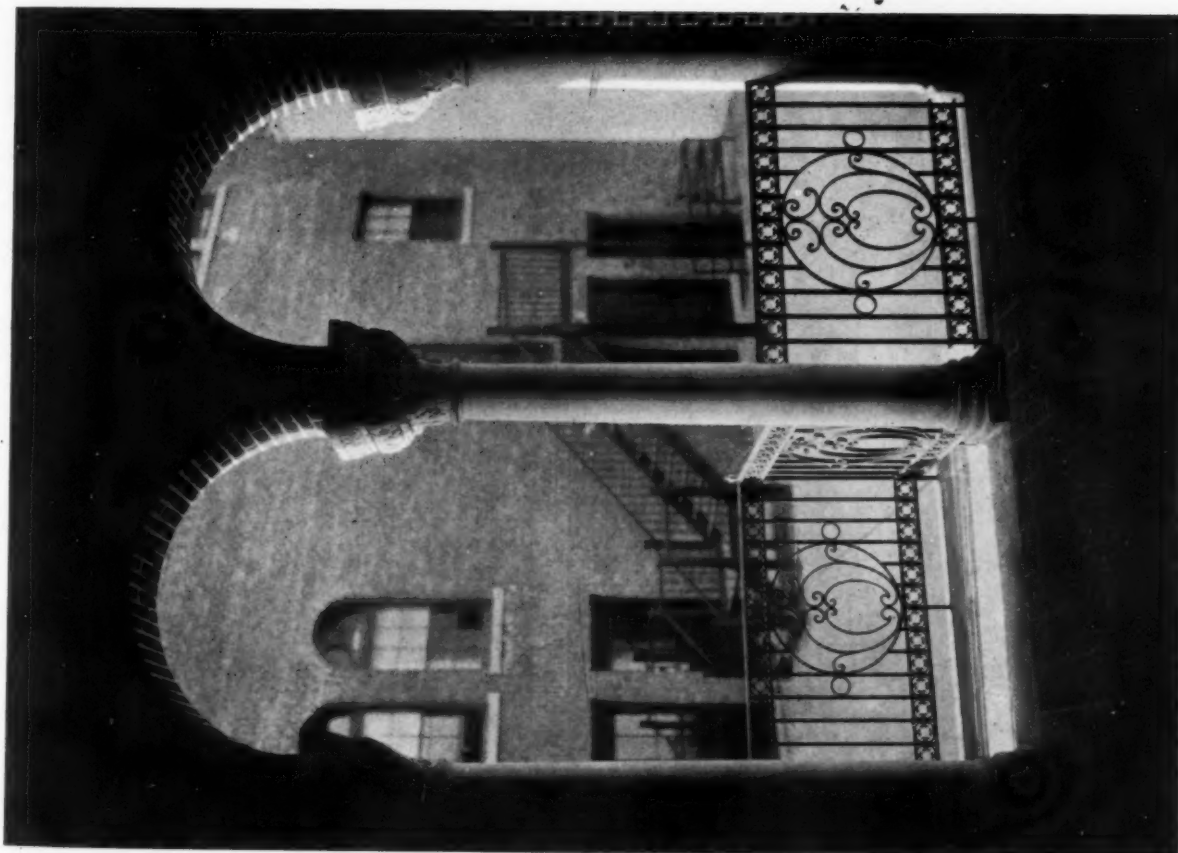
DINING ROOM, CONVENT OF ST. ROSE OF LIMA, NEW YORK
ROBERT J. REILEY, ARCHITECT





DINING ROOM BAY

DETAILS, CONVENT OF ST. ROSE OF LIMA, NEW YORK
ROBERT J. REILEY, ARCHITECT



A LOGGIA



✓ Old English Inns; Part I.

By CLINTON H. BLAKE, JR.

HE who would learn something of the life of the older England can do so in no better or more fascinating way than by a visit to some of the inns of Elizabethan and even earlier days. Both in their architecture and in their general atmosphere they are full of the life that was lived within them hundreds of years ago. There are many such within short distances of Westminster or St. Paul's. There are others scattered throughout England from the Scottish border southward, and from the Channel westward to the coasts of Devon and Cornwall. He who will can search them out with no great difficulty, and will find them fully as worth while as monuments, palaces, and cathedrals. Monuments they are indeed in the truest sense, and monuments which are very much alive. Interesting as part and parcel of the England of today, they are yet rich in historical associations, and carry on with little change the life of the England of King John, of Drake and of the Tudors, the colorful life of the times.

The unspoiled inn is sufficiently rare; the unspoiled inn in an unspoiled old English town is a prize indeed. Two such prizes may be found in the little town of Tewkesbury, not far from Gloucester. Dating from the eighth century, which saw the founding of its monastery, it is quite unspoiled. Its half-timbered houses are among the finest to be found in England. Its abbey, a successor of the eighth century monastery, is a pure delight. Its every street is crowded with rich historical associations.

At one end of the main village street, across the street from the present abbey grounds, is the "Bell" inn. At the other end, by the famous bridge across the Avon, built by King John, is the "Black Bear." They are two delightfully satisfying examples of the old English inn. The "Bell" guards the entrance to the town from the south, the "Black

Bear" the entrance from the north. Each radiates simple but ample hospitality and comfort. Each has its own peculiar appeal and charm. In either inn the traveler may sit him down with utter content and the knowledge that he may rest in peace, troubled by no curious tourist crowds, waited upon by one who is a true landlord, and surrounded by an atmosphere of quiet rural contentment which it would be difficult to surpass anywhere in England.

It is said that the "Bell" dates from about 1200. It may be that it was built a few years later. The date on its front, "1697," marks the year when it underwent a restoration, and it was quite evidently of somewhat venerable age at that time. In any event it appears that it was originally a part of the abbey property. It has been added to in modern times, but the additions and improvements have been carried out in good taste and do no harm. The older portion of the buildings is that facing the village street, that part in which the main entrance is still located. This part of the inn was originally

occupied by the monks, before the confiscation of monastic property by Henry VIII. The road to Gloucester, which now divides the inn from the abbey grounds, ran in old times along the river bank to the west, where now a charming little park is situated. The walls of the main lounge room still bear carefully preserved frescoes placed there by the monks during their occupancy. Some of the old oak paneling and beamwork in this room is very fine. Much of it is carved. The oak paneling and trim, beamwork and frescoes were brought to light not long ago when some 30 odd layers of wallpaper which covered them were removed. At the same time the old fireplace was uncovered and again put to proper use.

Across the hall is the taproom, which is scrupulously clean and glistening with its shining rows



The Bell Hotel from the Bowling Green



THE BELL HOTEL, TEWKESBURY
BUILT ABOUT 1200; RESTORED IN 1697



THE OLD BLACK BEAR TAVERN, TEWKESBURY
ESPECIALLY RICH IN OLD ENGLISH OAK, WITHIN AND WITHOUT

of glasses. Here at noon and in the evening gather the country folk for their noonday and evening glasses of ale,—or now and then perhaps something a wee bit stronger. No dining room in one of our great hotels could be more quiet or respectable, however. He would be a fanatical reformer indeed who could find aught here to which he could properly take exception. Indeed, the same may be said for substantially all of the bar rooms in the inns of England. There is nothing about them, except the contents of the kegs and bottles, which is reminiscent in the slightest degree of the saloon as we have known it in America. There is no drunkenness, nothing sordid. All is in order and, as the head master of Rugby School is reported to have said recently, the conversation compares very favorably with that which passes current in our fashionable drawing rooms and restaurants anywhere in America.

The "Bell" is the original of the house of Abel Fletcher in Miss Muloch's story of "John Halifax, Gentleman." A few paces away is the old mill which figures in the same story. Here it has stood for hundreds of years, and here today its wheel is still turning as we pass or linger a few moments to watch it from the river bank not a great distance away.

Behind the inn is a typical English flower garden enclosed by high brick walls with vines clambering upon them and, down each side of the path, a profusion of English roses, trained straight and high in the English fashion. Passing down this path and through the garden gate at the farther end we enter the famous bowling green enclosure, showing use.

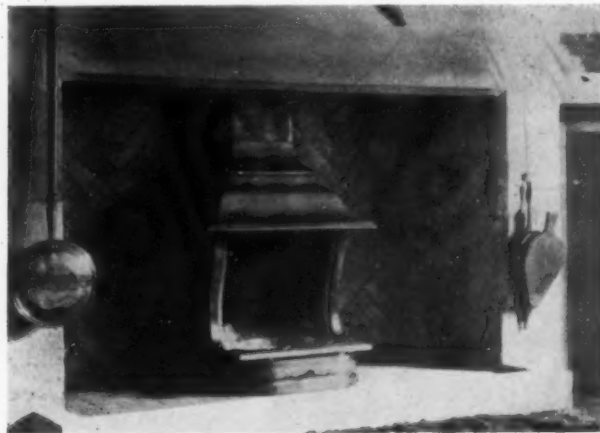
The bowling green is still kept in prime condition. Here the monks were wont to bowl seven hundred years ago, and here today each evening under the electric lights of the twentieth century gather the townsfolk to contend at the same games. About the edges of the green are little arbors under the yew trees where one may laze all day or watch the games by night. A few feet away, across the park, beyond the hedge, is the Ayon as it flows on from the old mill to join the Severn a bit farther down the valley. The description of this delightful spot in "John Halifax" is substantially accurate in every particular.

The "Black Bear" tavern at the other end of the village is far more limited in its bedroom accommodations. It lacks, too, the garden and grounds which are such attractions at the "Bell." It has its own peculiar charm, however, and he would be a prosaic mortal indeed who would not feel contented and happy within its walls. It is especially rich in old English oak, both within and without. Its exterior is charming, and the hand-hewn beams without and within the inn are as sturdy as when they were put in place. The bar ceiling has some very interesting plaster relief work. The main guest room, with its generous fireplace and casement windows, is the ideal inn bedroom of olden days. Everything is spotlessly clean here, as at the "Bell."

The building is practically all old, and no additions of any consequence have been made. The kitchen is a tiny place, lined round with shining copper. The western end of the inn was originally a stable, where the people driving to town from the surrounding country were able to stable their horses. This stable wing has been now incorporated in the inn proper, without any change in the exterior lines or elevation. All the fine old oak timbering has been carefully preserved, and the traveler may now dine and sip his ale where years ago the horses were accorded an equally generous, if somewhat different, fare and hospitality. No visitor to Tewkesbury should pass the "Black Bear" by. He will remember its peculiar charm long after he has left, and wish himself again within its ancient walls. There are a number of other inns in Tewkesbury, among them the "Hoppole" of Dickens fame. The "Bell" and the "Black Bear" go serenely on their respective ways, however, unrivaled among the resting places of the town in their Old World character. They are little changed from the days when they looked out upon the Battle of Tewkesbury and saw the waters of the pleasant little river by which they stand stained with the blood of defeated Lancaster. Here, indeed, as so frequently elsewhere in England, existing buildings seem to carry one back to the days of two, three or four hundred years ago. Long may the old buildings endure, to lend color and romance to our prosaic age!



Part of the Bowling Green at the Bell Hotel



An Old Fireplace at the Bell Hotel

SMALL BUILDINGS

✓ The Small Hospital

By EDWARD F. STEVENS

THE term "small hospital" may be more or less misleading, for under certain conditions a 100-bed hospital might be considered a small hospital, while in other locations a 50-bed institution would perhaps function as a larger hospital.

We think of a small hospital as one of from 20 to 50 beds, and during the present century hundreds of these small hospitals have been built throughout the length and breadth of our land. Perhaps the term "small" or "cottage" hospital may have started with the small English cottage hospitals, some of which were little more than dressing stations, although in these dressing stations much good work has been accomplished. We realize that the highest medical and surgical efficiency may be obtained only in hospitals of sufficient size to afford complete diagnostic, therapeutic and operating facilities, but notwithstanding this fact we shall probably always continue to have the small hospital with us; and while we realize that the scope of work in these hospitals is limited, they do afford a haven of rest where in isolated communities better care can be taken of the patients than generally in their homes.

To build a hospital of from 20 to 50 beds, let us say, in a community in close proximity to larger hospital units has become a very questionable procedure, for the reason that proper diagnostic facilities cannot well be obtained, and it is the feeling of the writer that the small hospital of the future will be built and maintained only in the outlying and sparsely settled districts, where the larger hospital is not available except by delay in traveling and at great expense. Establishing a hospital should be carefully done.

In an effort to establish such small hospitals, we often meet some such conditions as these. A wealthy citizen, feeling his obligation to a community and believing that a hospital would be the kindest expression of gratitude, leaves in his will his beautiful estate to a board of trustees with directions to develop and maintain the estate as a public hospital. These trustees are anxious to carry out the wishes of their late friend and neighbor, and proceed under the wise direction of their architect and medical staff to make this beautiful estate into a home for the care of the sick. Sometimes this procedure results in a fairly well functioning hospital, but generally the house, which has been planned for the pleasure of the owner and a family of three or four persons, with special reception rooms, dining rooms, etc., narrow stairs, narrow doors and elaborate

woodwork, does not yield to an economical adaptation for hospital purposes. Many times it is not only simpler but more economical to start at the foundation and erect a hospital building, possibly using the old mansion as a nurses' residence. A wise committee will endeavor to so use such an estate. Each instance demands individual treatment.

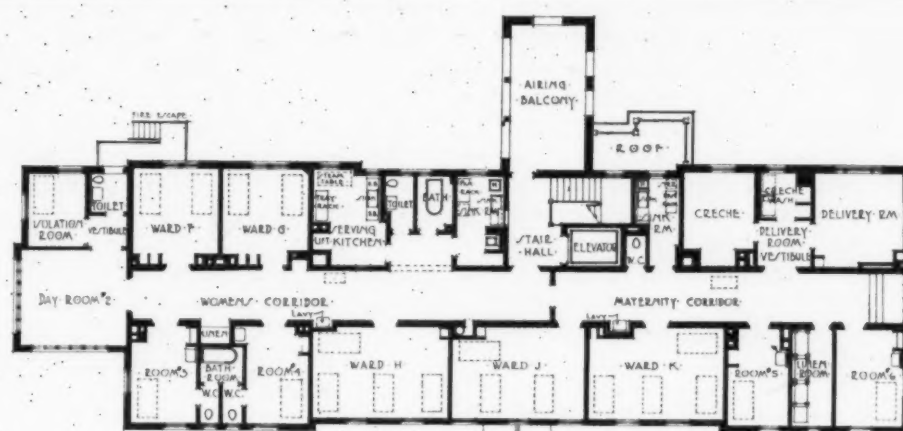
While we cannot apply the same rules and standards for the building of a small hospital that we would for a larger hospital of 100 to 500 beds, the same principles for the care of the patient must be considered, no matter how small the hospital; for after all, whether the hospital contains five or 500 beds, it should be built with the sick patient always in mind, and the comfort of that patient at all times should govern the plan. In the planning of the patient's room, the air, the light, freedom from noise, both from the exterior and the interior, the facilities for the proper service of palatable food, the isolation of noisy portions of the building, are all quite as important as the medical and surgical care which the patient will receive in the hospital.

In the planning of a hospital around a single individual (for after all the patients are merely a collection of individuals) just as much care should be used in the selection of the site as we would take in selecting sites for our own homes, which would be our homes for life. We should consider the rooms for the patients as we would those in our own homes for our own family and honored guests. A site, therefore, should be selected with pleasant surroundings and an outlook that will be at once inspiring and restful, where the morning sun will flood our principal rooms and the refreshing breezes give comfort for the afternoon. Whether the hospital be large or small, in selecting the site the question of drainage should be considered as well as the securing of a sheltered position of the buildings for protection from the winter winds and the summer heat.

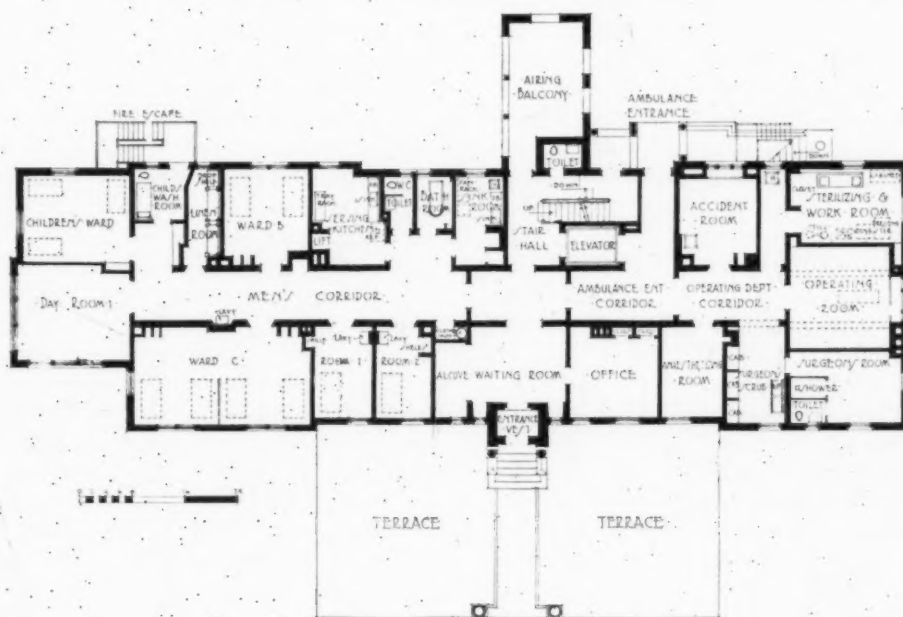
In the planning of our small hospital we should again consider the patients as our guests. Were we planning for guests in our own homes, we surely would not crowd them into one room, but would furnish separate rooms, or at least put no more than two in one room. The modern hospital, whether large or small, should be planned for the privacy and comfort of the patient. If it seems wise, for economy's sake in the construction, to have a few beds in one room, then it is the writer's opinion that these rooms should be subdivided by permanent



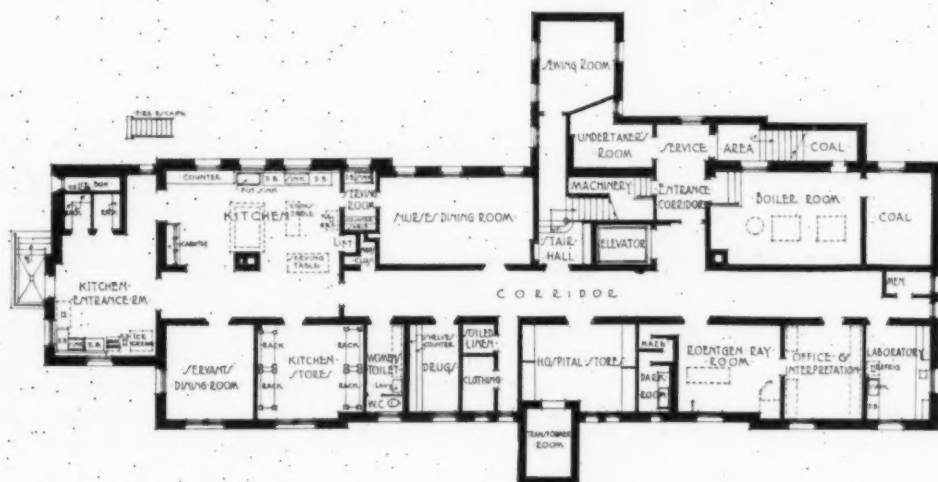
MARY LANE HOSPITAL, WARE, MASS.
EDWARD F. STEVENS, ARCHITECT



SECOND FLOOR



FIRST FLOOR



BASEMENT FLOOR

PLANS, MARY LANE HOSPITAL, WARE, MASS.
EDWARD F. STEVENS, ARCHITECT

screens, so as to afford the privacy of an individual room with the ease of caring for the customary ward.

With the patient comfortably housed in a pleasant room, the planning of the rest of the institution should be done around this point. The preparation of food, the care of the building, the location of the surgical section, the heating in winter, and the cooling of the building in summer should now be considered; and in planning these departments we should indirectly consider the comfort of the patients by directly considering the comfort of those who wait upon the patients. For instance, take the location of the kitchen. We often see in small institutions (and large ones too for that matter) the kitchens placed well below ground, with little or no outside light and less ventilation, and still expect the attendants to be happy and contented. If food can be served in a dainty, tempting manner the chances are better for an early convalescence. The kitchen should be located at not too great a distance for the proper service of food, and not near enough to disturb the patient by the noise and rattle of pots and pans. With the modern food conveyors of the fireless cooker type there should be little difficulty in transporting palatable food to a considerable distance. So also with the operating department, that most dreaded section of the hospital. It should be placed where the approach to it can be screened from the patient's view as much as possible. In the small hospital, the surgical and medical portion, kitchen and laboratory can often be placed on the first floor, thus leaving the stories above free for the housing of the patients. In this way the workshop of our little hospital is entirely hidden away from the sight and hearing of our sick patients, as indeed it should be.

With the proper distribution of these various departments on the first floor, we should not forget to make the entrance to our small hospital just as attractive as possible. It is here that the patient gets his first impression of an institution of this kind, which often has much to do with the effect of the treatment received in the hospital; for if the patient approaches through a stuffy little entrance, without distinction, without character, without the warmth of a home atmosphere, that first impression never leaves him. The writer believes that a generous, well planned, carefully decorated entrance, although it may occupy considerable area and is really in use only at times, is worth while and should not be considered extravagant. It would mean money well spent.

With a well-thought-out plan the design of the exterior should be a simple problem, and if the interior of the entrance should be homelike the exterior should be equally inspiring, with good lines, carefully laid out grounds, with shrubbery and flowers, and with parking spaces for motors (always at a little distance to preserve the necessary quiet).

The hospital, however large or small, should maintain its own laboratory, or at least be affiliated with the town laboratory, which is generally connected with the Board of Health. Provisions should also

be made for the use of the X-ray, since it is among the important factors in the hospital of today. The small community hospitals in the villages and towns of our country, far removed from the larger institutions, at once become the medical centers for the localities. These medical centers should be provided with ample meeting facilities for the use of the medical fraternity. This may mean the use of a nurses' dining room or sitting room, but some room should be provided, for its use will often be necessary.

Speaking of nurses, if it can possibly be avoided the nurses should not be housed in the same building with the sick patients, for when off duty they need relief from the strenuous and often heart-rending scenes with which they come in contact throughout their working hours. If they are housed in the same building, then they should be in a separate wing or on a separate floor,—where they would not disturb the sick; but a separate building is preferable.

The therapeutic as well as the æsthetic use of color in hospitals, large or small, plays an important part in the comfort and well being of the patient. The floors, the walls, the finish, as well as the color of the furnishings and hangings all count for good or bad, for who, weakened by sickness, enjoys staring at a glaring white wall or an unshaded light?

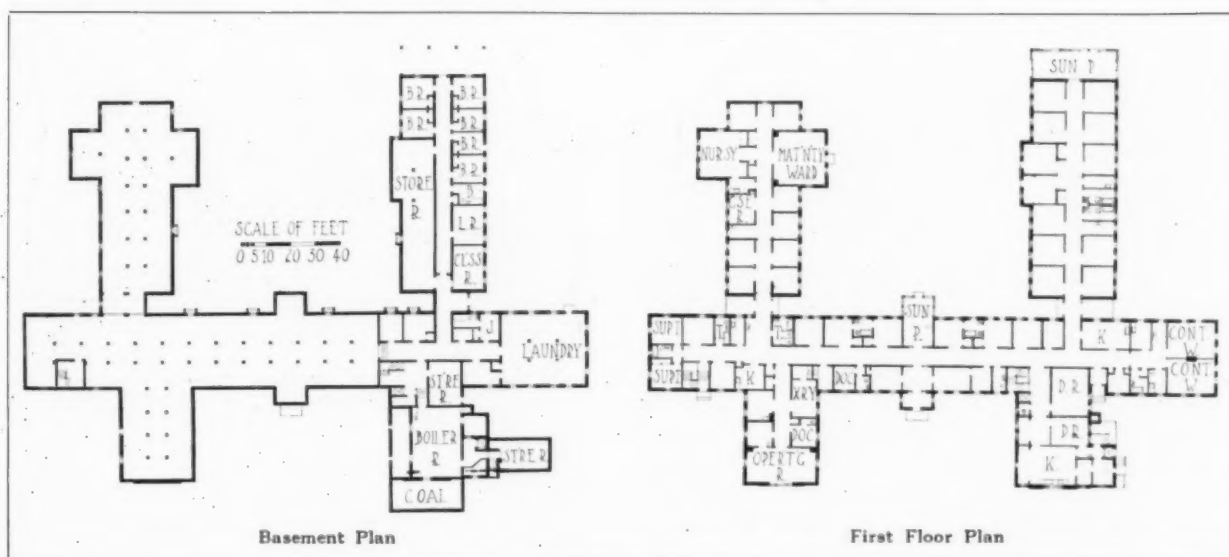
To illustrate some of the principles mentioned in the foregoing paragraphs, one plan of a small hospital is presented, herewith,—that of a community hospital at Ware, Mass. This hospital contains 30 beds. The working part, or as we might term it the "workshop" of the hospital, is on the basement and first floors, with ample provision for kitchen and dining facilities, heating plant, X-ray and laboratory on the basement floor and for the office and operating and accident department on the first floor, with the "workshop" portion carefully shut off from the patients. The patients, both ward and private, have every facility for comfort, with airing balconies, day room and utilities. This small hospital has a complete maternity department, and a children's and isolation department. Designed in the Colonial style, it makes an attractive appearance from the exterior and is also a properly functioning small hospital.

During the past few years a complete change has been made in the point of view from which a hospital, large or small, is regarded. The old fashioned hospital, bleak and chill, and with its generally "institutional" character was indeed likely to depress if not terrify patients as they entered; apparently it had never occurred to architects or hospital superintendents that patients even more than people who are well are affected by their surroundings. The modern hospital (and particularly the small hospital, which because of its size seems to be more intimate) is likely to be bright, cheerful, and planned with a view to giving patients something at least of the atmosphere of an individual home. Skillful use is made of color in walls, draperies, and floor coverings, and excellent taste is used in selecting furniture and other accessories, not necessarily of usual hospital character.



Photos, Paul J. Weber

STOWELL MEMORIAL HOSPITAL, CLAREMONT, N. H.
OFFICE OF R. CLIPSTON STURGIS, ARCHITECTS



FORUM SPECIFICATION AND DATA SHEET—143

Stowell Memorial Hospital, Claremont, N. H.
Office of R. Clipston Sturgis, Architects

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Concrete foundations; brick walls, wood frame and slate roof.

EXTERIOR MATERIALS:

Brick.

ROOF:

Slate.

WINDOWS:

Wood.

FLOORS:

Linoleum on concrete.

HEATING:

Steam with gravity.

INTERIOR MILL WORK:

Gum wood.

INTERIOR WALL FINISH:

Painted plaster.

DECORATIVE TREATMENT:

Painted walls; stained gum wood finish.

NUMBER OF BEDS:

52.

APPROXIMATE CUBIC FOOTAGE:

400,000.

COST PER CUBIC FOOT:

34 cents.

DATE OF COMPLETION:

February, 1924.

THE square foot area has been no consideration in the plan of this attractive memorial hospital in New Hampshire. Only one story in height, the carefully balanced building covers an extensive area of ground. Simplicity marks the exterior elevations, where Harvard brick laid in Flemish bond, brick window sills and four-centered window arches produce a pleasingly restrained and dignified effect, suggestive of much of the early Colonial architecture.

The plan of this building includes every department needed in a suburban or country hospital. One wing or pavilion is used entirely for maternity cases,

while another wing on the opposite side of the rear court is devoted to general medical patients. Here are located 12 rooms or small wards, each planned to contain two beds. At the end of the corridor, running the length of a pavilion, is a spacious sun porch. In the main building are located the operating department, rooms for the superintendent and his assistants, an X-ray room, large and small diet kitchens, two isolated contagious wards, and a large kitchen with adjacent dining rooms for both nurses and servants. Nine single or private bedrooms are also included in the main or central building of the hospital.



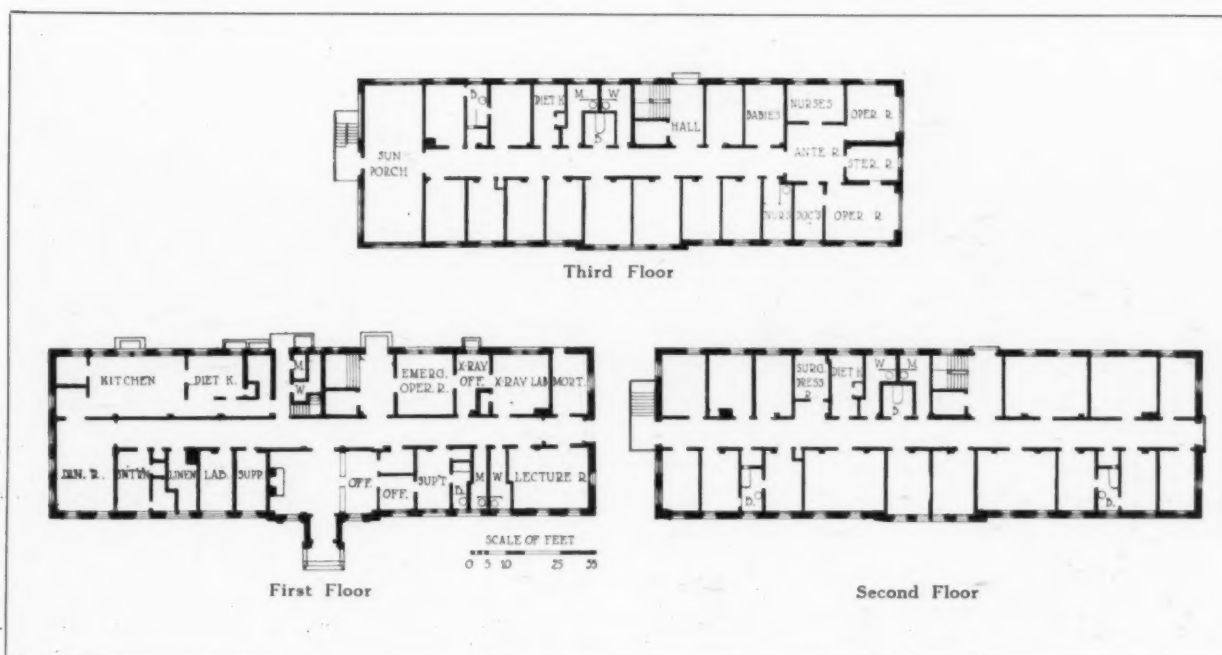
Operating Room Wing



The Main Entrance



INGALLS MEMORIAL HOSPITAL, HARVEY, ILL.
CHATTEN & HAMMOND, ARCHITECTS



THIS small memorial hospital contains approximately 31 beds. The building, which is fire-proof, cost 46 cents per cubic foot, not including the separate boiler house and laundry equipment. In design the exterior elevations show the use of Renaissance details. This is particularly true of the front and side entrances, which show carefully studied detail in this style. Quoin blocks emphasize and strengthen the corners of the building and the center entrance bay. The main entrance porch and windows at either side are pleasantly joined in one architectural motif. Whether or not this motif would have been more successful had it included the corners of this bay may be open to question.

The plan is typical of most small hospitals, occupying a single rectangular building. An entrance hall at the center connects directly with a long corridor extending the length of the structure. Off of this

corridor on the main floor are located the offices and apartment of the superintendent and the various utility rooms essential to the hospital management and equipment, such as a small lecture hall, X-ray office and laboratory, emergency operating or clinic room, and main and diet kitchens. The second and third floors are similar in plan to the first, each containing a center corridor extending the length of the building. These two floors are occupied almost entirely by bedrooms, the majority of which are planned to contain single beds. At one end of the third or top floor are located two operating rooms and various smaller rooms necessary to this department of the hospital. Much of the interest and home-like appearance of this hospital are due to its surroundings in a suburb of Chicago, where ample area, enclosed by a privet hedge and devoted to lawns, trees and shrubbery, affords light, air and sunshine.



Main Entrance, Ingalls Memorial Hospital



Entrance Facade

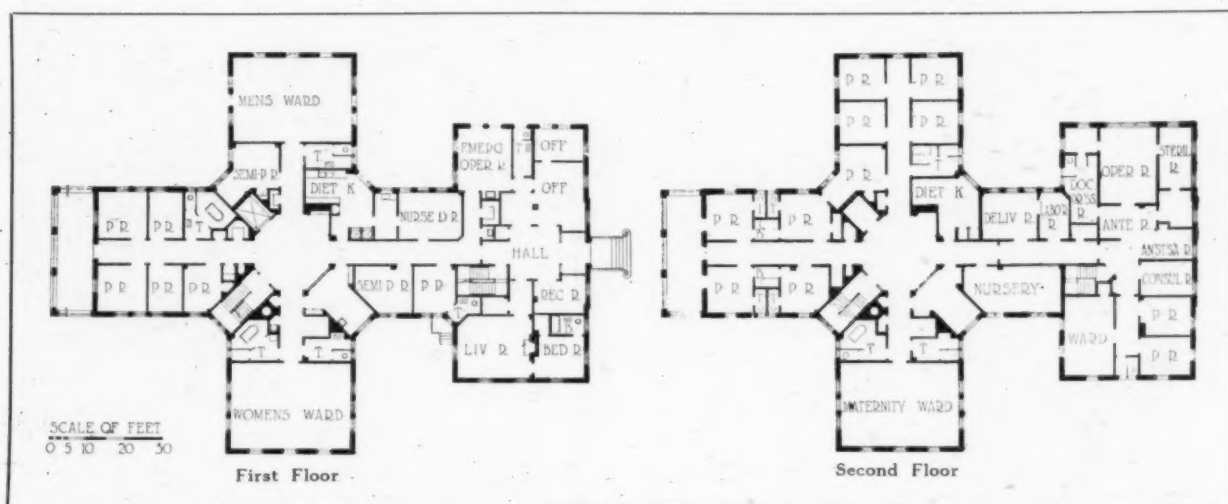


Photos. G. H. Van Ande

View from Rear

NORTHERN WESTCHESTER HOSPITAL, MT. KISCO, N. Y.

BENJAMIN WISTAR MORRIS, ARCHITECT



FORUM SPECIFICATION AND DATA SHEET—144

Northern Westchester Hospital, Mt. Kisco, N. Y.
Benjamin Wistar Morris, Architect

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Steel and concrete.

EXTERIOR MATERIALS:

Brick.

ROOF:

Wood joists, slate finish.

WINDOWS:

Wood sash.

FLOORS:

Cement, covered with linoleum and rubber.

HEATING:

Hot water.

INTERIOR WALL FINISH:

Plaster, painted.

NUMBER OF BEDS:

48

APPROXIMATE CUBIC FOOTAGE:

328,000.

COST PER CUBIC FOOT:

Approximately 75 cents.

DATE OF COMPLETION:

May, 1925.

DESIGNED in a simple adaptation of the Colonial style, this two-story hospital building shows an unusually interesting plan, so arranged that additional wings may be constructed when needs require.

The principal entrance opens into a wing containing on the first floor the offices of the superintendent and head nurse, together with a reception room and small emergency operating room. Shut off by a door from the business portion of the first floor, a central corridor leads to the main part of the hospital proper, where on the first floor are located wards for both men and women, each planned to contain eight beds.

The nurses' dining room, pantry and diet kitchen, together with five private rooms and one semi-private room, as well as several toilets and bathrooms, occupy the greater portion of the first floor. Fireproof stairways lead from both the entrance hall of the business wing of the hospital and from the center of the main portion of the building to the second floor, where are located 11 private rooms, a maternity ward, diet kitchen, large operating room, maternity operating room, nursery and various storage and utility rooms. The exterior design shows a careful study of proportion as well as of fenestration.



Main Entrance

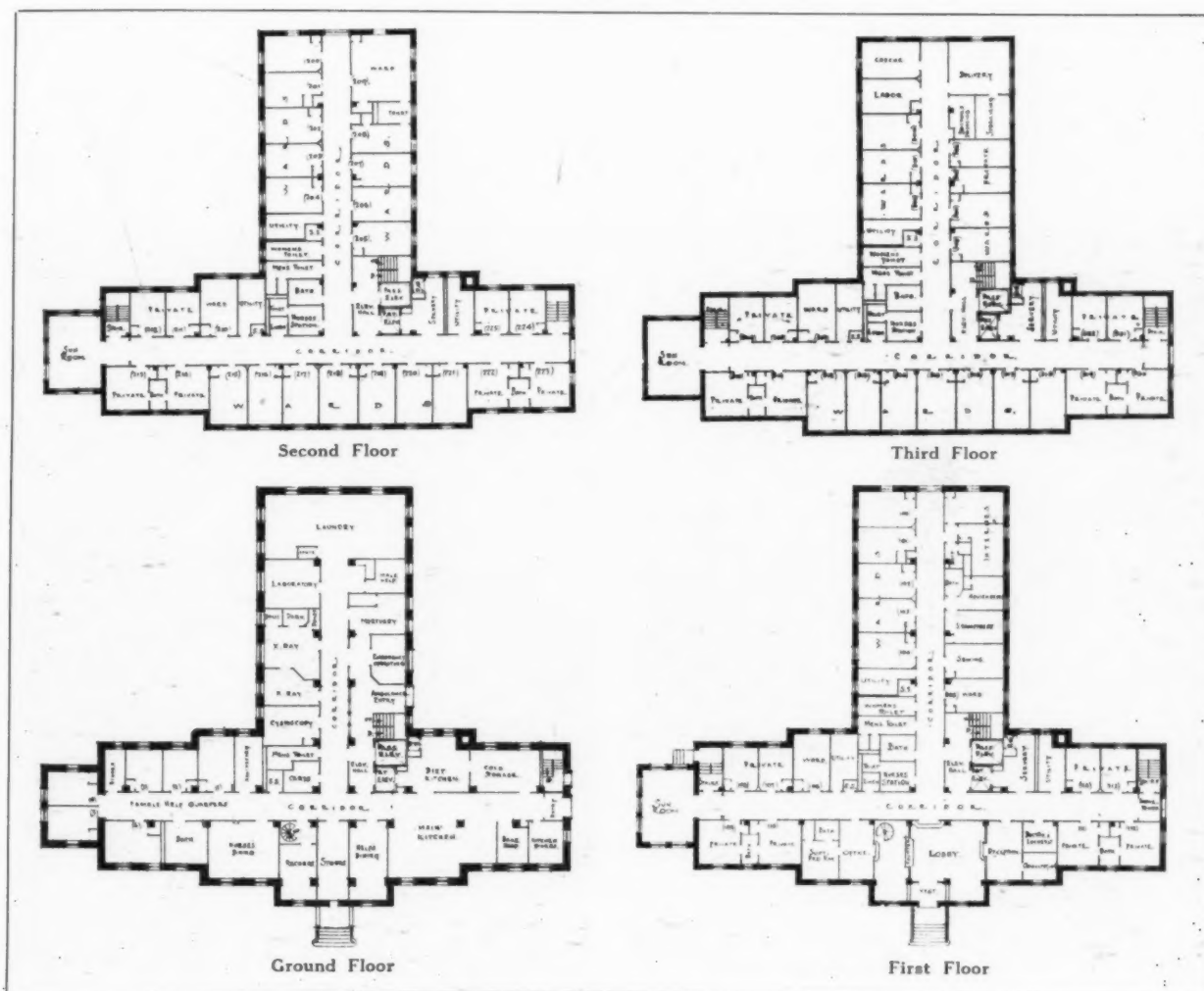


Porch Wing



Photos. P. R. Papin

CHRISTIAN HOSPITAL, ST. LOUIS
HOENER, BAUM & FROESE, ARCHITECTS



FORUM SPECIFICATION AND DATA SHEET—145

Christian Hospital, St. Louis,
Hoener, Baum & Froese, Architects

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Reinforced concrete; brick bearing walls.

EXTERIOR MATERIALS:

Buff brick and limestone trimming.

WINDOWS:

Wood; steel in operating room.

FLOORS:

Terrazzo, marble and tile.

HEATING:

Vacuum steam.

PLUMBING:

Fixtures, vitreous china. Circulating drinking water on all floors.

ELECTRICAL EQUIPMENT:

Special night and bedside lighting for all patients' rooms; silent nurses' call system; doctors' autocal system. Elevators.

INTERIOR MILL WORK:

Birch throughout; walnut in lobby.

INTERIOR WALL FINISH:

Operating room and delivery and sterilizer rooms, tile; other walls painted lead and oil.

DECORATIVE TREATMENT:

All rooms painted in different tones of cheerful colors. Lobby polychromed.

NUMBER OF BEDS:

140.

APPROXIMATE CUBIC FOOTAGE:

532,000.

COST PER CUBIC FOOT:

63 cents complete, excepting furniture, linen and surgical equipment.

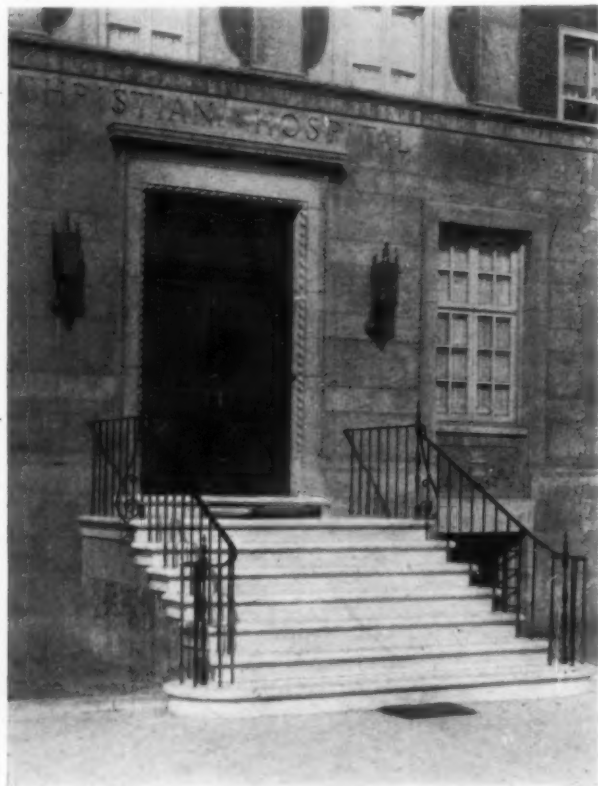
DATE OF COMPLETION:

October, 1925.

ALTHOUGH containing 140 beds, some 40 of which are temporarily used by the nurses, this hospital building may logically be classed as a small hospital. A large basement makes possible the use of five floors for practical purposes. The exterior design shows a restrained use of Renaissance motifs. The entrance door is unusually well proportioned and interesting in detail, located in a rather unusual one-story bay which projects out from the main building to meet the entrance drive. The introduction of windows of such sizes as to sufficiently light the basement floor necessitated the placing of the

first floor several feet above the level of the entrance court. The rear of the basement is all above grade on account of the steeply sloping lot on which the hospital stands, making it possible to introduce at one side of the basement an ambulance entrance adjacent to both passenger and freight elevators.

The reception and consultation rooms are at the right of the entrance lobby, and the desk and offices of the superintendent and his staff are at the left. Designed apparently for private patients only, each of the three main floors is divided into a number of small bedrooms, and no general wards are included.



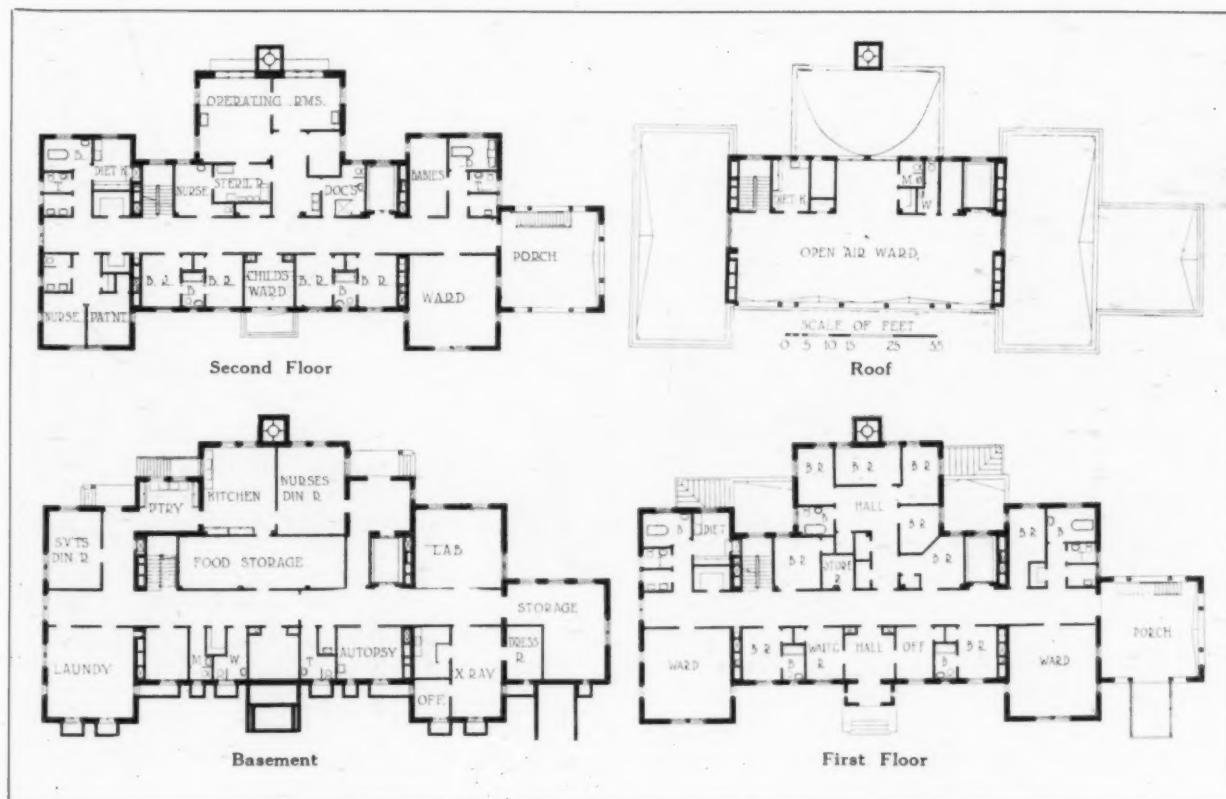
Main Entrance



In the Lobby



WAYNESBORO HOSPITAL, WAYNESBORO, PA.
WYATT & NOLTING, ARCHITECTS



FORUM SPECIFICATION AND DATA SHEET—146

Waynesboro Hospital, Waynesboro, Pa.,

Wyatt & Nolting, Architects

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Fireproof.

EXTERIOR MATERIALS:

Brick.

ROOF:

Tin and slag.

WINDOWS:

Double-hung, with hospital shutters.

HEATING:

Vacuum steam.

NUMBER OF BEDS:

About 40.

ELECTRICAL EQUIPMENT:

Lighting.

APPROXIMATE CUBIC FOOTAGE:

253,000.

APPROXIMATE COST PER CUBIC FOOT:

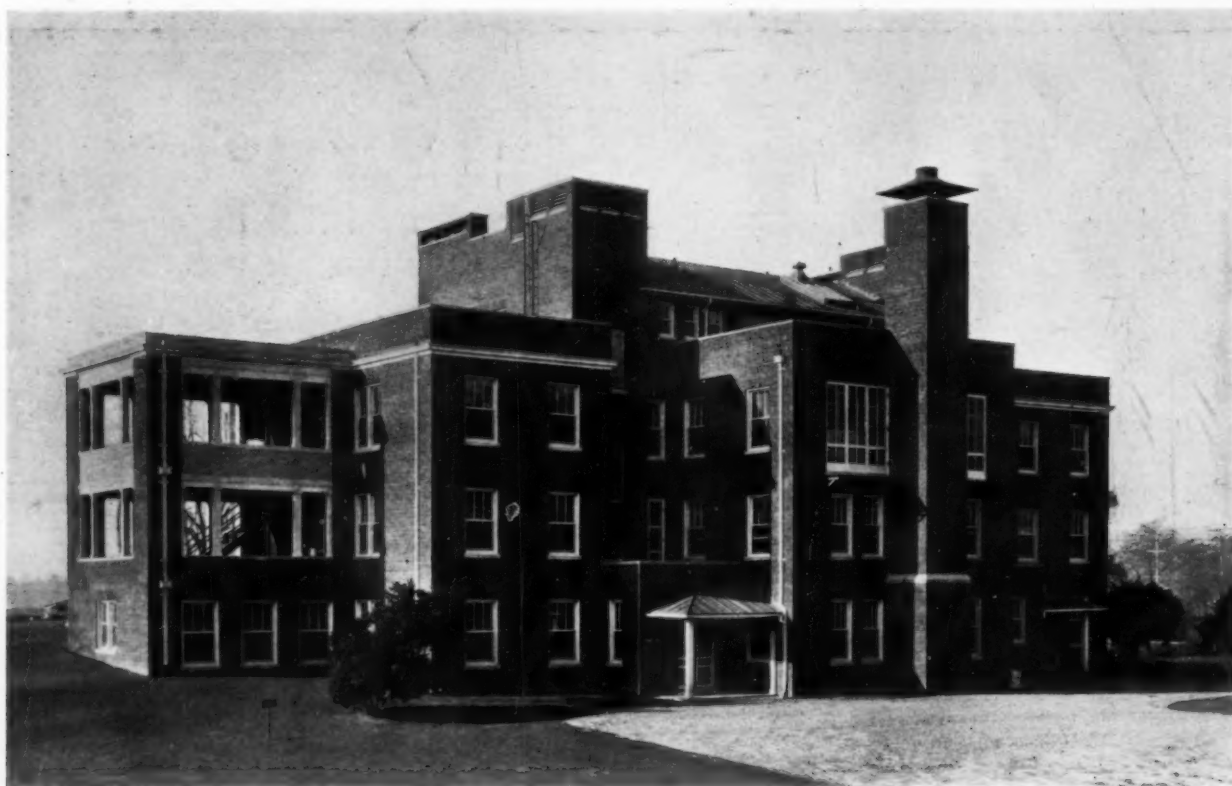
45 cents.

DATE OF COMPLETION:

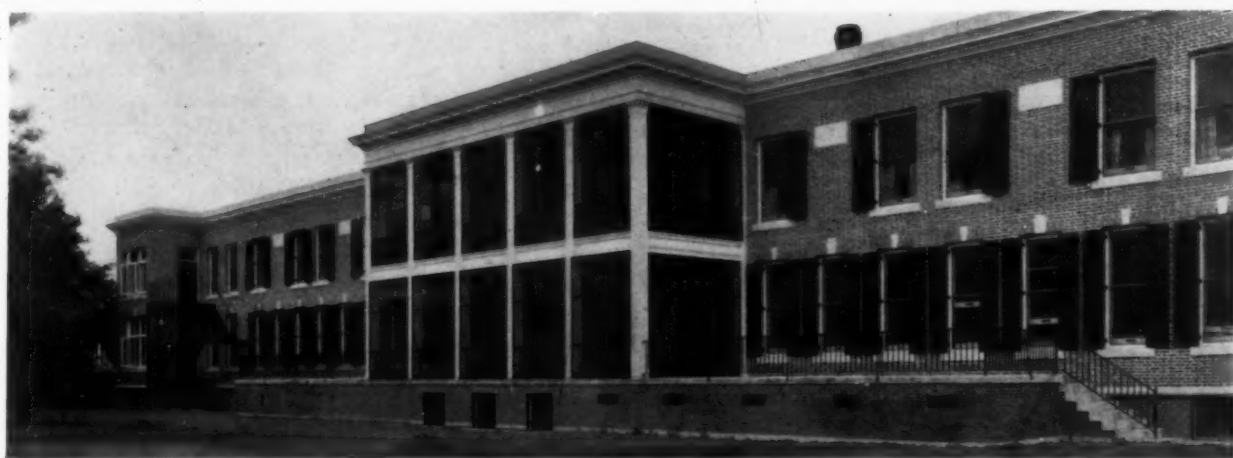
October, 1922.

THE front elevation of this interesting small hospital building gives the effect of two stories and a basement, the third floor, which occupies the center part of the structure, being successfully disguised by a long open porch or loggia. There is a simplicity, directness or neatness about this design which is very pleasing. The use of blinds successfully takes away much of the institutional character of the appearance of the building. Due to the sharp drop in grade at the rear of the structure, it is possible to have here four complete stories above ground, adding much valuable and adequately lighted area to the interior.

The chief feature of this hospital is a large open-air ward designed for the treatment of tubercular cases, which occupies the greater part of the top floor of the main building. The basement floor, which is at the rear of the structure, and on a level with the grade, contains besides an ample ambulance entrance with connecting elevator, a large kitchen, pantry, food storage space, laboratory, dining rooms for both nurses and servants, an X-ray room, autopsy room, laundry and numerous storage and toilet rooms. On the first or main floor are two wards and eight private bedrooms, besides necessary offices.

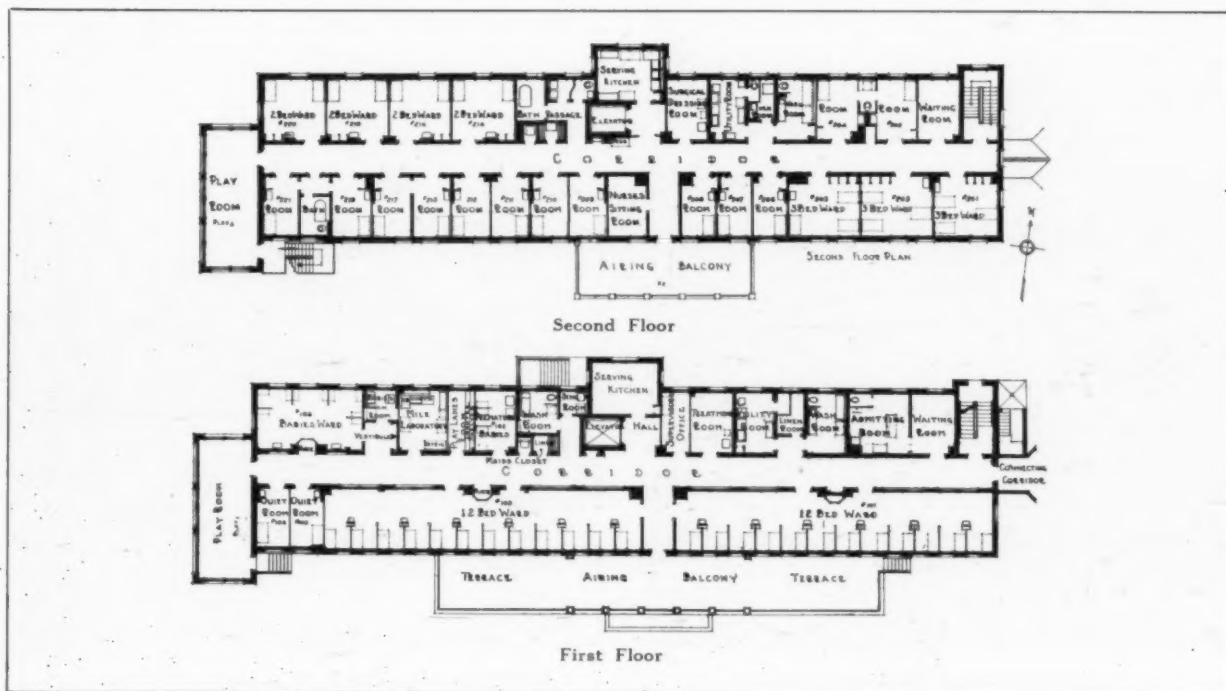


Rear View, Waynesboro Hospital



Photos. Paul J. Weber

CHILDREN'S PAVILION, ST. LUKE'S HOSPITAL, NEW BEDFORD, MASS.
STEVENS & LEE, ARCHITECTS



FORUM SPECIFICATION AND DATA SHEET—147

Children's Pavilion, St. Luke's Hospital, New Bedford, Mass.

Stevens & Lee, Architects

OUTLINE SPECIFICATIONS.

GENERAL CONSTRUCTION:

Fireproof.

EXTERIOR MATERIALS:

Brick and stone.

FLOORS:

Terrazzo, cement, linoleum and rubber.

HEATING:

Steam, direct.

PLUMBING:

Special hospital make.

ELECTRICAL EQUIPMENT:

Lights, nurses' calls, etc.

INTERIOR WALL FINISH:

Plaster.

NUMBER OF BEDS:

57 for children, 14 for babies.

APPROXIMATE CUBIC FOOTAGE:

300,000.

COST PER CUBIC FOOT:

63 cents.

TOTAL COST:

\$190,000.

YEAR OF COMPLETION:

1926.

WHEREVER the question of limited area does not intrude itself, it seems very wise to design hospital buildings not more than two stories and a basement in height. This Children's Pavilion, which is a part of a larger hospital group, is an excellent example of carefully studied hospital planning. Each of the main stories of the building is unusually high.

As this Children's Pavilion is joined to the main hospital group by a connecting corridor, no main entrance is required, but at the point where the connecting corridor meets the building, an ambulance entrance is introduced on the ground level, and a

door for exit opens off the connecting corridor. The first floor contains two long 12-bed wards on one side of the center corridor, and a variety of utility, storage, reception, laboratory and diet rooms on the opposite side. A short entry leads from the main corridor of this floor onto the airing porch and terrace. A similar entry on the second floor opens onto the upper part of the airing porch. Thirteen single bedrooms, three 3-bed wards and four 4-bed wards, a general washroom and two bathrooms, together with a serving kitchen, surgical dressing room, utility and waiting rooms, complete the layout of this floor.



12-Bed Ward

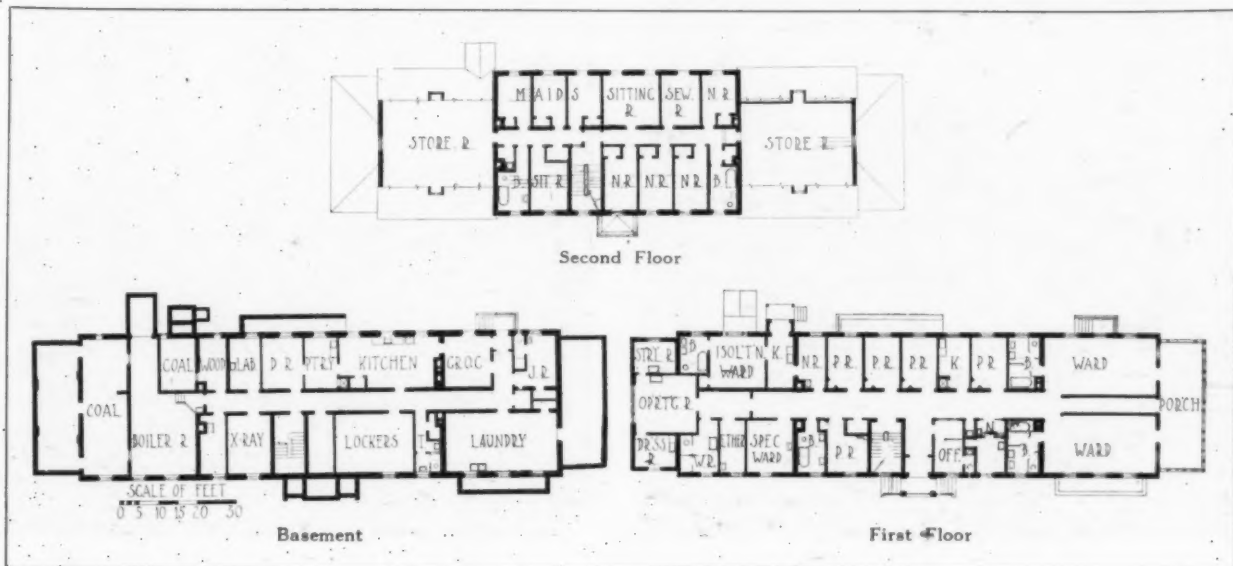


The Play Room



Photos, Paul J. Weber

PORTER MEMORIAL HOSPITAL, Middlebury, Vt.
TROWBRIDGE & LIVINGSTON, ARCHITECTS



FORUM SPECIFICATION AND DATA SHEET—148

Porter Memorial Hospital, Middlebury, Vt.,
Trowbridge & Livingston, Architects

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Fireproof; combination terra cotta and reinforced concrete floor construction.

EXTERIOR MATERIALS:

Brick with marble trim.

ROOF:

Slate.

WINDOWS:

Double-hung and casements.

FLOORS:

Cement finished in linoleum.

HEATING:

Steam, low pressure.

PLUMBING:

Brass pipe for hot water; wrought iron for other uses.

ELECTRICAL EQUIPMENT:

X-ray, sterilizers, etc.

INTERIOR MILL WORK:

Cypress, varnished in service portion; enamel paint for wards, etc.

INTERIOR WALL FINISH:

Plaster, enamel paint.

NUMBER OF BEDS:

21 patients'; 10 nurses' and maids' rooms.

APPROXIMATE CUBIC FOOTAGE:

182,500.

COMPLETED COST PER CUBIC FOOT:

71 cents.

DATE OF COMPLETION:

June, 1925.

FOLLOWING the almost universal custom in the eastern part of the United States, this small hospital in one of the northern New England states, containing accommodations for only 21 patients, shows Colonial precedent and inspiration in its design. It is, however, quite as complete in its layout and equipment as any of the larger and more pretentious hospitals considered in this group. There is a main building, two stories and a half in height, with a high, well lighted basement, at either end of which low wings balance the design. In order to give sufficient height to the basement, the first or

main floor was located several feet above the grade of the entrance drive, necessitating a few steps up to the main door. Access to the basement floor from the outside of the building is had through an area door five steps below grade at the rear of the building.

The basement layout includes the laundry, janitor's room, large kitchen with adjoining pantry, and rooms for groceries, boiler, coal, X-ray service, locker and storage space. The main stairway leading from the basement to the floors above is logically located near the center of the building. The second floor contains two wards and a complete isolation ward.



The Porch

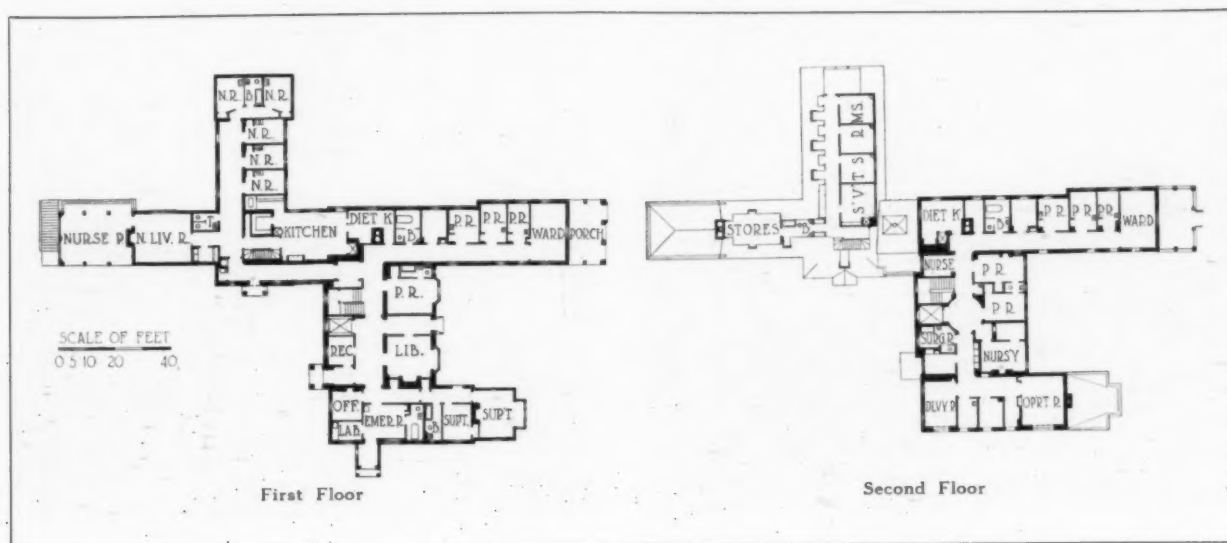


A Ward



Photos. Paul J. Weber

THE PETERBOROUGH HOSPITAL, PETERBOROUGH, N. H.
LITTLE & RUSSELL, ARCHITECTS



FORUM SPECIFICATION AND DATA SHEET—149

The Peterborough Hospital, Peterborough, N. H.,
Little & Russell, Architects

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Fireproof to first floor level; non-fireproof above.

EXTERIOR MATERIALS:

Red brick.

ROOF:

Slate.

WINDOWS:

Wood.

FLOORS:

Wood and linoleum.

HEATING:

High-pressure steam.

PLUMBING:

Brass piping.

ELECTRICAL EQUIPMENT:

Standard.

INTERIOR MILL WORK:

Oak.

NUMBER OF BEDS:

18.

TIME OF COMPLETION:

Spring of 1921.

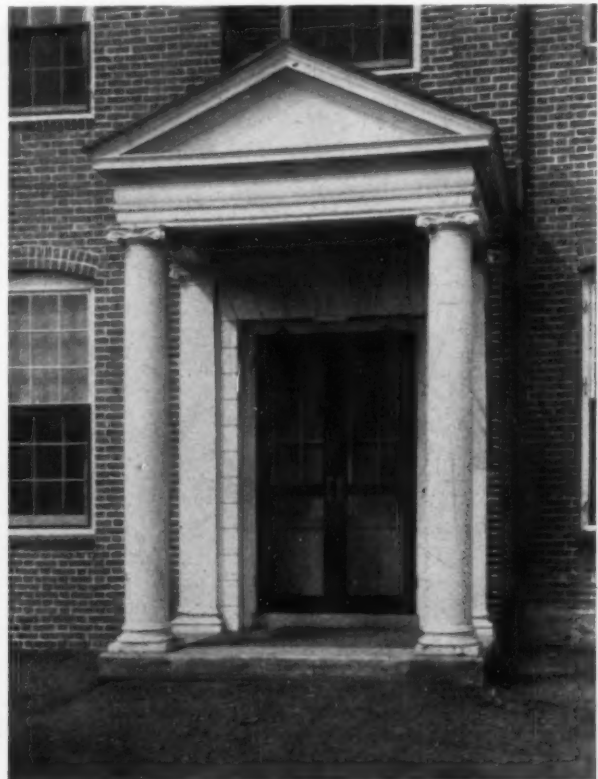
CHARACTERISTICALLY "New England" in the delightful manner in which Colonial precedent has been followed, this small 18-bed hospital is unique. Apparently economy in area and cost was no object in the plan of this picturesque and interesting hospital group. The introduction of the nurses' home as a part of the whole composition adds much to its architectural charm and balance.

The plan is such that another wing similar to that now used as a nurses' home may readily be added whenever need may require it. The quarters of the superintendent and the head nurse are spacious and

conveniently arranged. The minor front of the hospital shows an interesting use of bay windows on the first or ground floor, and of a two-story porch at the end of one wing. The superintendent's living room is unusually attractive, with its large fireplace and spacious bay window, and open on three sides. The plan of the second floor shows two operating rooms, one large and one small, connected with which are various surgical and utility rooms occupying one end,—and five single bedrooms, a diet kitchen, linen room, general bathroom, utility room and nurses' service room complete the arrangement of the floor.



In the Library



Main Entrance

INTERIOR ARCHITECTURE

The Taintor Homestead, East Avon, N. Y.

Text and Drawings by GEORGE FULTON, JR.

THE Taintor house was built in the year 1812 by Joseph Pearson, who emigrated from eastern to western New York with four of his brothers. The house is one of three buildings which these pioneers erected on the village square of East Avon, the other two being a brick tavern, diagonally opposite, and a brick church across the street. All three are still standing and are being used for their original purposes, but the house has suffered the least from alterations, only a few having been made.

The farm of Joseph Pearson extended north and south of the main highway for about a mile, he being the second white man to possess the property. About 1860 it came into the ownership of Dr. S. Taintor through marriage, and it is to him that we owe the excellent physical condition of the house and the row of graceful elms which line the highway for a mile or more. The farm, however, has dwindled from the large area of well cultivated land to an acre of pleasant, shaded lawn and gardens.

The house is of rough-hewn log frame with clapboarded exterior, stone foundation walls, and brick chimneys,—the timbers from the farm of the pioneer, the stone from the fields and cellar excavation, and the brick from a kiln on the banks of the Genesee River. Except for new sills, put under the house in 1920, and the alteration of the east chimney into a vault, about 50 years ago, the structure of the main house is still in its original state. There are the usual one-story extensions at the rear, consisting of kitchen, tool room, wood shed, carriage room, etc., which add greatly to its charm. The front entrance has been marred by the addition of a hood with scroll sawed brackets of the '70s, but beneath

can be seen the refined moulded work of the early carpenter, probably something of an architect as well.

The interior has undergone no major alterations, except for the reconstruction of the east chimney into a vault on the first story. The vault is large enough for several people to stand upright and was used for the safe keeping of large sums of money before the advent of a bank in the district. In the northeast room and in the cellar below, there may still be seen the evidence of a once large kitchen hearth with its brick ovens. The fireplace, mantels and stairs, as can be seen from the illustrations and drawings, possess a great deal of merit, although not unusual for the period. The base blocks of the sitting room mantel have proportions suitable for a much larger pilaster, but there is no evidence that it was meant for other than what it is. The china cupboard and the floor pattern of the sitting room are quite distinctive. The cupboard does not seem to have been built into the house, but was evidently added later. The upper part, above the chair rail, however, seems to be of the same period, while the lower portion has the characteristics of later work. The sitting room is supposed to have been the public room, as the house was used for the entertainment of travelers, as were most of the houses of the place and period. The pattern is painted, in oil, on a floor of wide pine boards and is graded in tone, as shown. It is now quite indistinct, in spite of the attempts to preserve it in past years. It can be made out only with difficulty.

The excellent condition of the Taintor house speaks well for the workmanship of the early builders, but not nearly so eloquently as do the cellar stairs, which Mr. Pearson built at the time as "temporary!"



The Taintor Homestead, East Avon, N. Y.

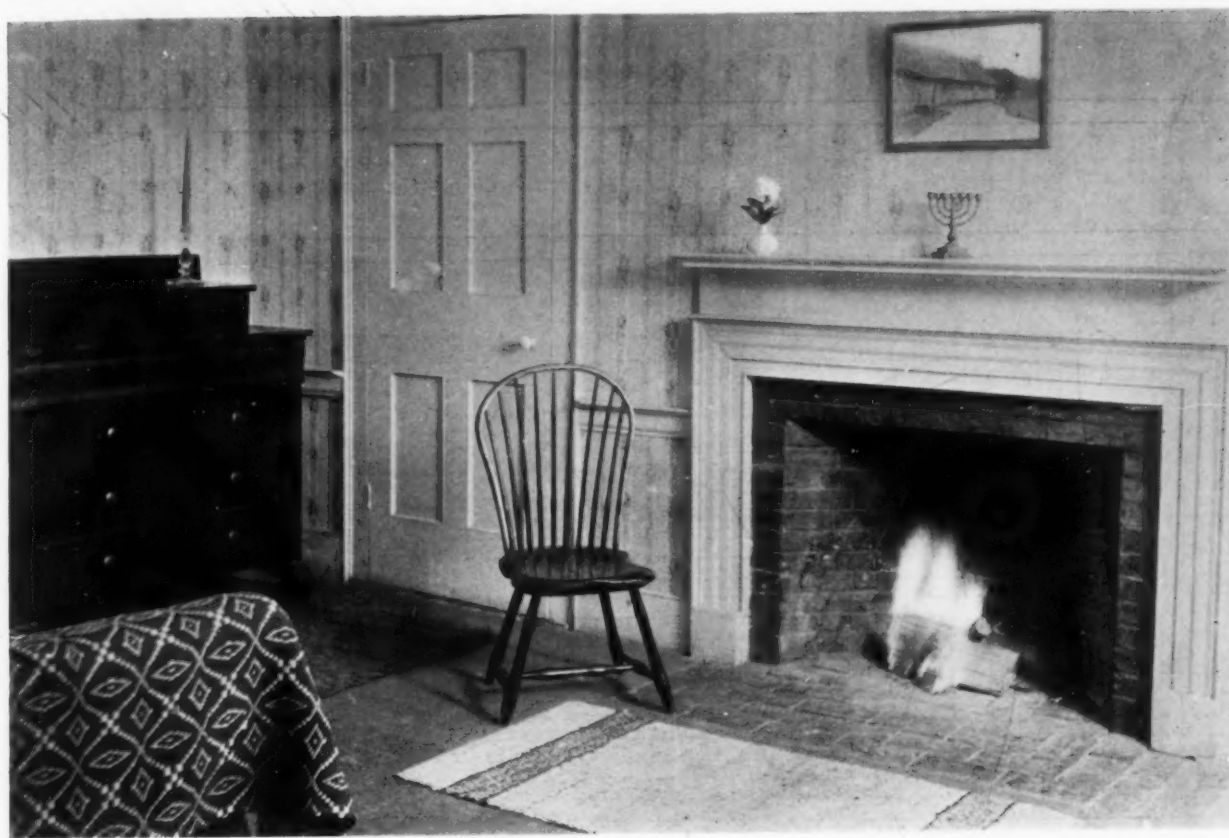
Erected 1812



Dining Room Mantel, Taintor Homestead
Measured Drawing on Page 253



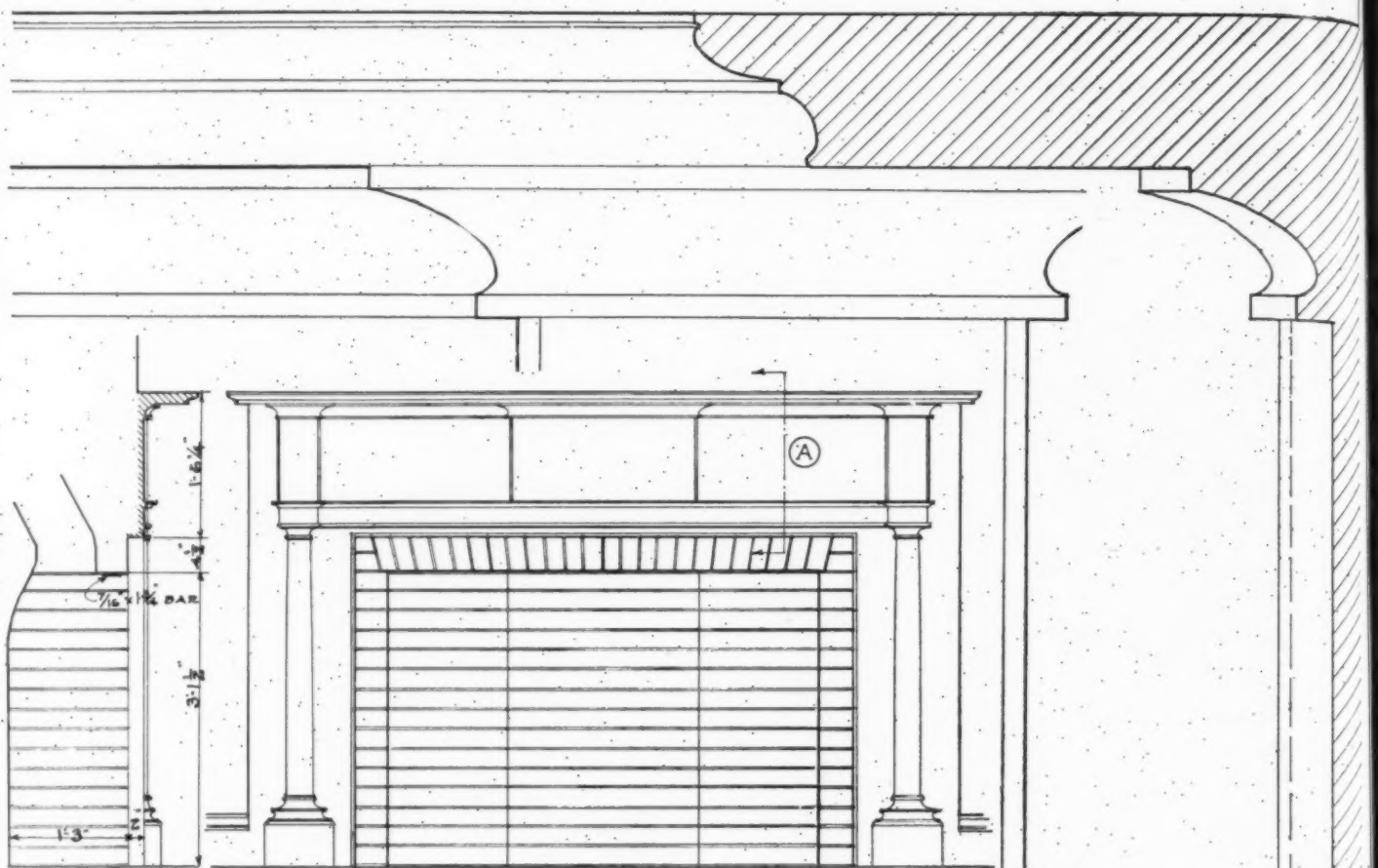
Sitting Room Mantel, Taintor Homestead
Measured Drawing on Page 252



A Bedroom Fireplace, Taintor Homestead

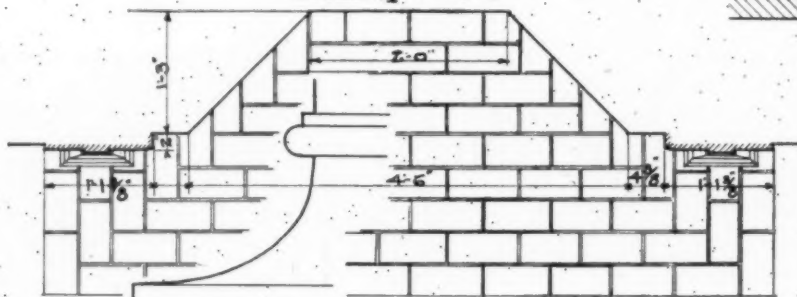


Stair Hall, Taintor Homestead



SECTION
SCALE $\frac{1}{2}$ " = 1'-0"

ELEVATION
SCALE $\frac{1}{2}$ " = 1'-0"

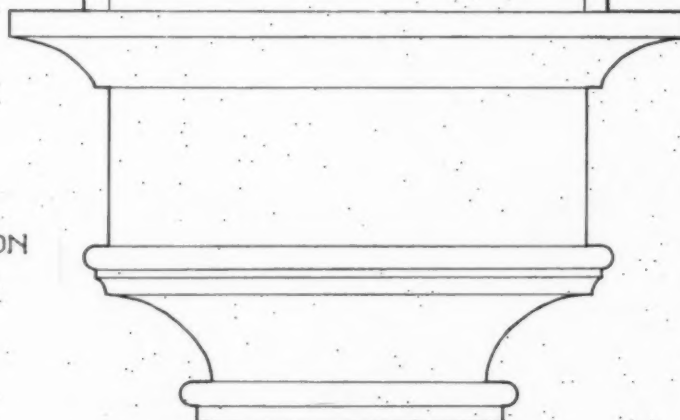


PLAN
SCALE $\frac{1}{2}$ " = 1'-0"

SIDE
ELEVATION
OF BASE

FRONT
ELEVATION
OF BASE

DETAILS $\frac{1}{2}$ FULL SIZE



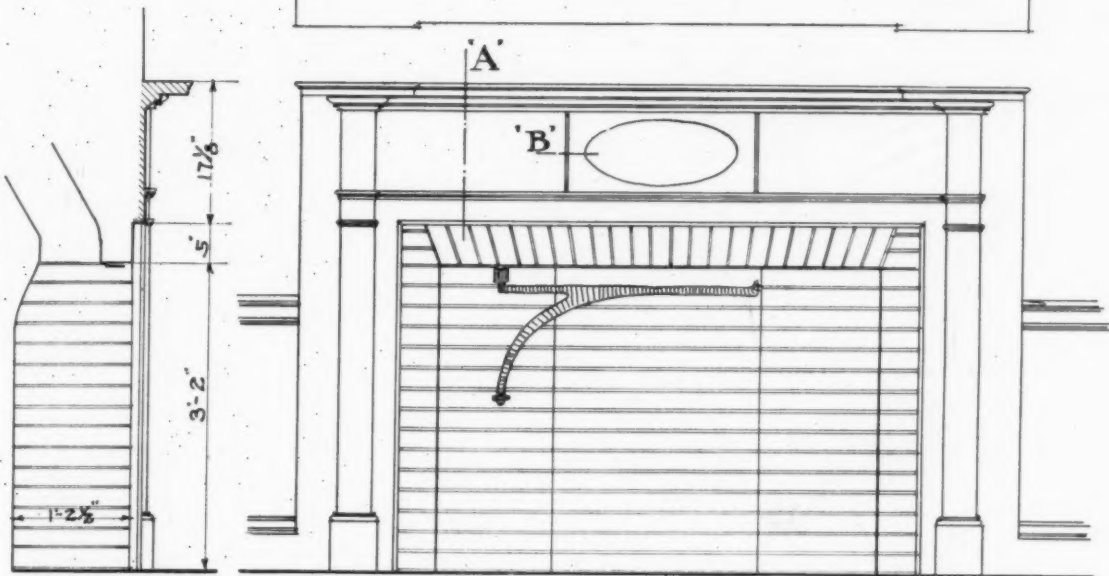
ELEVATION OF CAP

SECTION (A)

SITTING ROOM MANTEL
THE TAINTOR HOMESTEAD
EAST AVON - NEW YORK
ERECTED 1812

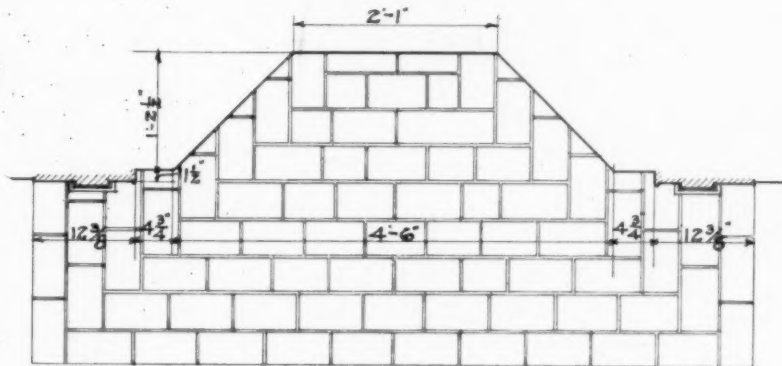
MEASURED & DRAWN BY GEORGE FULTON JR. N.Y.C.

PLAN OF SHELF



~ SECTION ~

~ ELEVATION ~
SCALE 1/2 INCH = 1 FOOT



~ PLAN ~



SECTION AT 'B'

BASE OF
PILASTER

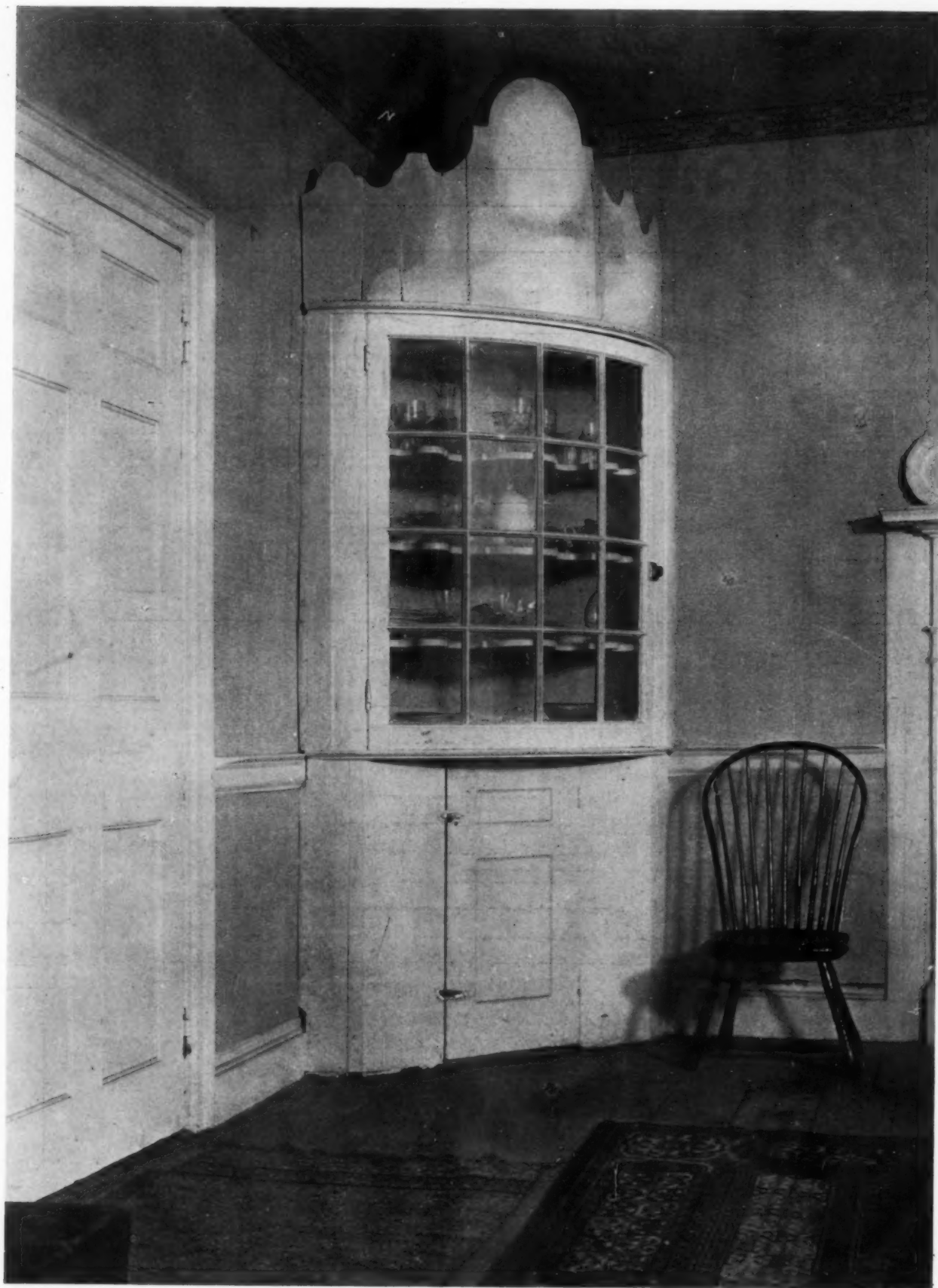
SECTION
AT 'A'

BASE MOLD

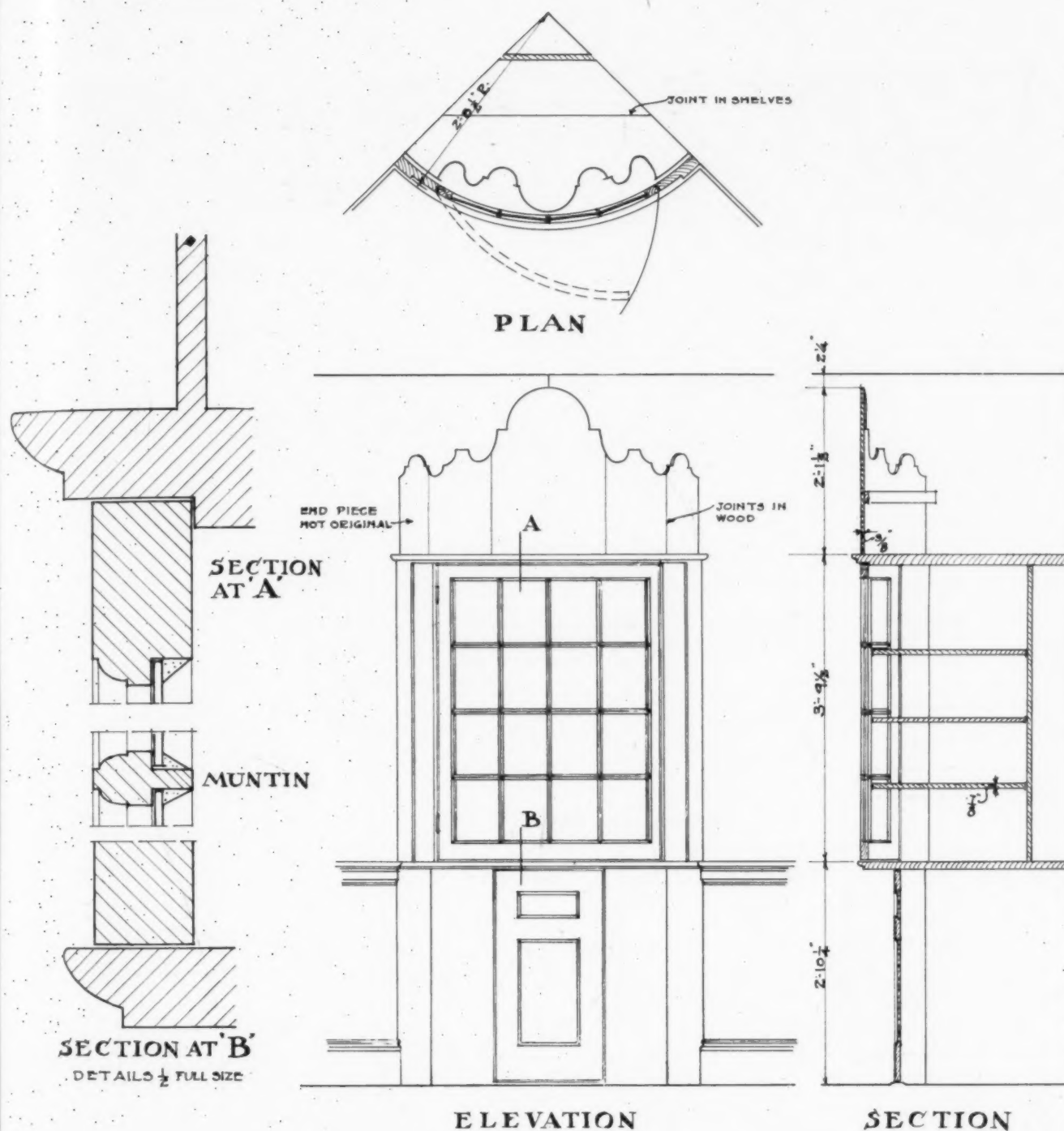
DETAILS 1/2 FULL SIZE.

~ DINING ROOM MANTEL ~
THE TAINTOR HOMESTEAD
~ EAST AVON ~ NEW YORK ~
ERECTED 1812

MEASURED & DRAWN BY
GEORGE FULTON, JR.
NEW YORK CITY



China Closet and Doorway, Taintor Homestead
Measured Drawings on Pages 255 and 256



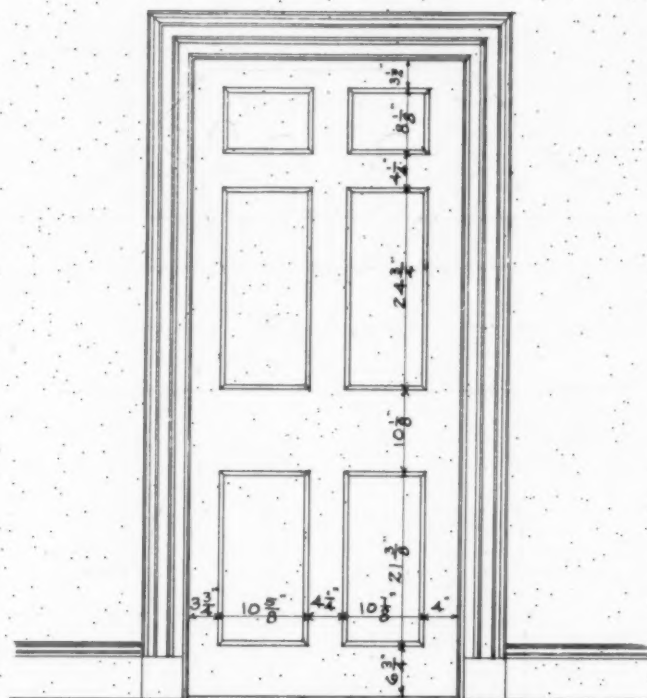
DETAILS 1/2 FULL SIZE

PLAN BELOW COUNTER
SCALE 1/2 INCH = 1 FOOT

~ CHINA CLOSET ~
THE TAINTOR HOMESTEAD
EAST AVON ~ NEW YORK ~
ERECTED 1812

MEASURED & DRAWN BY
GEORGE FULTON JE-
NEW YORK CITY

CHAIR RAIL
IN HALL AND
DINING ROOM.



~ SITTING ROOM DOOR & TRIM ~
SCALE 1/2 INCH = 1 FOOT

MOLDING IN HALL

MOLDING IN SITTING ROOM

PLINTH

DOOR TRIM

FINISH FLOOR

BASE MOLD

ELEVATION OF BASE AND TRIM

DETAILS 1/2 FULL SIZE

~ INTERIOR DOORS AND TRIM ~
THE TAINTOR HOMESTEAD
EAST AVON ~ NEW YORK.
ERECTED 1812

MEASURED & DRAWN BY
GEORGE FULTON JR.
NEW YORK CITY